Design and Competitive Considerations in the Research, Development, and Launch of Pharmaceutical Products in the Lebanese Market

MBA thesis

By

Rudy Keyrouz

Under the direction of

Dr. Michel Chalhoub

Lebanese American University

October 2009
Lebanese American University
Graduate Studies

We hereby approve the project of

Mr. Rudy Keyrouz

Candidate of the MBA degree *

Project entitled

Design and Competitive Considerations in Research, Development, and Launch of Pharmaceutical Products in the Lebanese Market

Dr. Michel Chalhoub Date 18 Jan 2010
Dr. John McGill (read) Date 18 Jan 2010
Mr. Shawki Saffiedin Date 18 Jan 2010

*we also certify that written approval has been obtained for any proprietary material contained therein
Plagiarism Policy Compliance Statement

I certify that I have read and understood LAU’s Plagiarism Policy. I understand that failure to comply with the Policy can lead to academic and disciplinary actions against me.

This work is substantially my own, and to the extent that any part of this work is not my own I have indicated that by acknowledging its sources.

Date: February 2010
Name: Rudy Tarif Keyrouz
Signature: [Redacted]
I grant the LEBANESE AMERICAN UNIVERSITY the right to use this work, irrespective of any copyright, for the university's own purpose without cost to the university or its students and employees. I further agree that the university may reproduce and provide single copies of the work to the public for the cost of reproduction.
# Table of Contents

**INTRODUCTION**

SUBJECT OF THE THESIS
*Design and Competitive Considerations in the Research, Development, and Launch of Pharmaceutical Products in the Lebanese Market*

**SCIENTIFIC BACKGROUND**
- Definition of Menopause
- History & evolution of menopausal products
  - About Menopause
- Other Menopausal solutions

**BUSINESS BACKGROUND**
- About Abela Freres
- About Nutrisante Laboratories

**Market Analysis**
- General Market & Consumer Trends
- The Lebanese Market
- Demographics of Lebanon & potential market segment

**Methodology**
- Market Survey
- Hypothesis formulation
- Questionnaire results
- Hypothesis validation & Analysis

**Marketing Strategy**
- Marketing Mix
- Product
- Price
- Place
- Promotion
- People

**Financial Strategy & Projections**

**Conclusions & Recommendations**

**Reference list**
INTRODUCTION

A. Design and Competitive Considerations in the Research, Development, and Launch of Pharmaceutical Products in the Lebanese Market

Lebanon has occupied before the civil war the highest ranks in the region in the Pharmaceutical industry. It kept falling afterwards and although the situation improved on many levels it is still currently facing huge competition in the region. In this paper, I will be discussing, reviewing, and evaluating the potential entry of a new product to that particular market. The product is called "Manhae", a menopause product produced by "Nutri Sante" laboratories in France. The product will be launched by the company I am working with, "Abela frères s.a.l.", a company that imports pharmaceutical products and distribute it in Lebanon and is currently expanding in the Middle East.

I will be revealing information that will be helpful in choosing whether or not this product will be successful if launched in Lebanon. The information will include a description of Abela frères, description of the product Manhae and Nutri Santé, history and description of menopause products, general market and consumer trends, Lebanese market and demographic review. In the research part, the main parameters tested are the (1) willingness and (2) the ability of the Lebanese menopausal women to buy the product. A questionnaire over a sample of 101 Lebanese menopausal women was conducted and the regressions were fed on SPSS and Excel forms. The results have highlighted and identified the (1) market segment, the (2) communication channel and (3) the price of the product. These results have guided the marketing strategy that should be implemented in the launching process and were introduced in the financial projections to test the profitability of the product.
Scientific Background

Definition of Menopause

Menopause is a natural event that normally occurs to women between the age of 45 and 55.

However its effect on women varies from one individual to another. Some women only feel mild symptoms and have an overall positive feeling about the experience. Others however suffer significantly from the symptoms of the transition including; hot flashes and night sweats, heart pounding or racing, difficulty sleeping, mood changes, sexual responsiveness, forgetfulness, urine leakage, vaginal dryness, and joint stiffness.

If a women is suffering from these symptoms there are numerous treatments available such as Hormone Replacement Therapy (HRT), acupuncture, herbal or natural remedies. Some women have experience relief from lifestyle changes. (Ref 1)

With the trend to older motherhood, many women will be interested in recent news of a hormone test that can predict menopause. But it’s important to know that the test can’t tell you how long you can wait to have children, as some reports have suggested.

Two research papers were based on hormone levels in more than 600 women from Michigan, who had tests every year for 14 years. The results provide a "map" showing how hormone levels changed over time, and how those changes relate to when women stopped having menstrual periods. The main finding was that levels of a hormone called AMH (anti-Mullerian hormone) dropped sharply, to barely-detectable levels, four to five years before women had their final period. Researchers think this drop is related to the women having few eggs left in their ovaries. So, by the time a hormone test shows a woman is within five years of menopause, she may have little chance of getting
pregnant. That might be helpful information to have, but it's no use if a woman wants to know how long she can wait before she tries to get pregnant.

"What you need to know. There's no test that tells you how long you'll be fertile. But hormone levels can be a useful guide if you're considering fertility treatment."

—Anna Sayburn, patient editor, BMJ Group (Ref 2)

"The ovaries contain 200,000 - 400,000 follicles, tiny sacks that contain the materials needed to produce mature eggs, or ova. The ovaries produce two major female hormones: estrogen and progesterone". "Adam dictionary of health".

"The uterus is a hollow muscular organ located in the female pelvis between the bladder and rectum. The ovaries produce the eggs that travel through the fallopian tubes. Once the egg has left the ovary it can be fertilized and implant itself in the lining of the uterus. The main function of the uterus is to nourish the developing fetus prior to birth".

Estrogens have an effect on about 300 different tissues throughout a woman's body:
- They are essential for the reproductive process and for the development of the female organs.
- Estrogens determine the characteristic female distribution of body fat on the hips and thighs, which develops during adolescence.
- They also are involved in tissues in the central nervous system (including the brain), the bones, the liver, and the urinary tract.

Estrogen has different forms:

- The most potent form is estradiol.
- The other important, but less powerful, estrogens are estrone and estriol.

Most of the estrogens in the body are produced by the ovaries, but they can also be formed by other tissues, such as body fat, skin, and muscle.

*Progestosterone.*

Progestosterone, the other major female hormone, is necessary for thickening and preparing the uterine lining for the fertilized egg.

**Menopause and Perimenopause**

As a woman ages, her supply of eggs declines. Menopause occurs naturally after the woman’s supply of follicles has been depleted and menstruation ends completely. (Menopause may also be induced if the ovaries are surgically removed.)

Menopause does not occur suddenly. A period called *perimenopause* usually begins a few years before the last menstrual cycle. Some experts believe there are three stages in the transition:

- Early Stage. The beginning of perimenopause can begin in some women in their 30s, but most often it starts between ages 40 - 44. It is marked by changes in menstrual flow and in the length of the cycle. There may be sudden surges in estrogen.
• Middle Stage. In the middle cycle, periods become irregular but they are not skipped.
• Late Stage. In the late stages, women begin missing the periods until they finally stop. About 6 months before menopause estrogen levels drop significantly. The fall in estrogen triggers the typical symptoms of vaginal dryness and hot flashes (which can last from half a year to more than 5 years after onset of menopause).

At the point at which menopause occurs, the following hormonal changes occur:

• Ovarian secretion of estrogen and progesterone ends.
• Once the ovaries have stopped producing estrogens, however, they still continue to produce small amounts of the male hormone testosterone, which can be converted to estrogen (estradiol) in body fat. In addition, the adrenal gland continues to produce "androstenedione" (a male hormone), which is converted to estrone and estradiol in the body fat.
• The total estrogen produced after menopause, however, is far less than that produced during a woman's reproductive years.

The average age of women at menopause today is 51.4 years although it can occur as early as age 40 to as late as the early 60s. Women now have a life expectancy of more than 80 years. Currently, women can expect to live some 30 or 40 years of their life in the postmenopausal state.

Menopause is not a disease. However, many conditions are associated with estrogen depletion, including heart disease, osteoporosis, and other complications. Fortunately, effective treatments are available for these conditions.

In a number of studies, most women have reported menopause as a positive experience and have welcomed it with relief and as a sign of a new stage in life.
Complications

After a woman reaches menopause, her average life expectancy is 30 - 40 years. During those years, however, she faces certain health risks due to lower levels of estrogen that cause accelerated bone loss and an increase in LDL cholesterol (the so-called bad cholesterol). Her risks for serious disorders are estimated at 46% for heart disease, 20% for stroke, and 15% for hip fracture. In addition, about 8% of people over 75 have dementia, with postmenopausal women having 1.4 - 3 times the risk for Alzheimer's disease compared to men.

Other disorders associated with menopause:

- Osteoporosis is a disease of the skeleton in which bones become brittle and prone to fracture. In other words, the bone loses density.
- Depression: may occur as a woman transitions into menopause (perimenopause), even among women with no history of clinical depression. Hormonal changes and declines in estrogen levels are probably involved in this process.

Symptoms of clinical depression include:

- Loss of interest or pleasure in activities once enjoyed
- Persistent (longer than 2 weeks) sad mood
- Decreased energy
- Sleep problems (insomnia or oversleeping)
- Feelings of guilt, worthlessness, and hopelessness
- Difficulty concentrating
- Mental decline: Estrogen, the primary female hormone, appears to have properties that protect against the memory loss and lower mental functioning associated with normal aging.
- Gum disorders & tooth loss: Estrogen therapy has been associated with reduced gum bleeding and with decreased bone loss around the teeth and women who take estrogen are less likely to lose their teeth. Thus, the
same principle that helps prevent bone loss in osteoporosis is also at work in preventing bone loss in the mouth.

- **Eye Disorders**: Estrogen, progesterone, or both appear to protect against cataracts.
- **Urinary Tract Infections**

  Women are at increased risk for recurrent urinary tract infections after menopause. Research suggests that estrogen may prevent infection by increasing the number of lactobacilli, a microorganism that fights infection by preventing bacteria from adhering to vaginal cells.

- **Wrinkles**

  Estrogen may help prevent slackness and dryness in the skin and reduce wrinkles.

- **Sleep Disorders**

  Menopause is associated with more sleeping problems, including inability to fall asleep and nighttime wakefulness.

- **Symptoms**

  The most prominent symptoms of the transition to menopause include:

  - **Hot flashes and night sweats**. Women often experience hot flashes as an intense build-up in body heat, followed by sweating and chills. Some women report accompanying anxiety as the sensation builds. In most cases, hot flashes resolve within 2 years of menopause, although in some women they may persist for years. Women who have a hysterectomy (surgical removal of the uterus) are less likely to experience hot flashes than women who have a natural menopause. However, women who have surgical removal of both ovaries, and who do not receive hormone replacement therapy, may have more severe hot flashes than women who enter menopause naturally.

  - **Heart pounding or racing** can occur, with or without hot flashes.
• **Difficulty sleeping.** Insomnia is common during perimenopause. It may be caused by the hot flashes or it may be an independent symptom of hormonal changes. A 2006 study indicated that severe hot flashes are frequently associated with chronic insomnia.

• **Mood changes.** Mood changes are most likely to be a combination of sleeplessness, hormonal swings, and psychological factors as a woman undergoes this intense passage in her life. Once a woman has reached a menopausal state, however, depression is no more common than before, and women with a history of premenstrual depression often experience significant mood improvement.

• **Sexuality.** Sexual responsiveness tends to decline in most women after menopause, although other aspects of sexual function, including interest, frequency, and vaginal dryness vary. It is useful to remember that the symptoms of menopause eventually go away.

• **Forgetfulness.** This appears to be one of the few symptoms that are common across most cultural and ethnic groups.

  • **Urine leakage.**
  • **Vaginal dryness.**
  • **Joint stiffness.**

Women from different ethnic and or cultural groups report different menopausal symptoms. For example, in one study hot flashes occurred in about 30% of Caucasians and 45% of African-Americans. Hispanic women tended to complain of urine leakage, vaginal dryness, and heart pounding. Japanese and Chinese women experienced far fewer menopausal symptoms, except for forgetfulness. All groups complained about this symptom.

• **Lifestyle Changes**

Simple changes in lifestyle and diet can help control menopausal symptoms such as hot flashes. Avoid hot flash triggers like spicy foods, hot
beverages, caffeine, and alcohol. Dress in layers so that clothes can be removed when a hot flash occurs. For vaginal dryness, moisturizers, and non-estrogen lubricants, such as KY Jelly, Replens, and Astroglide are available.

- **Quit smoking.** Skin ageing can be worsened by smoking, added to the decline in oestrogen levels in menopause years makes it even worse. This might trigger some women to quit smoking.

- **Nurturing Relationships.** Mood swings of menopause might make some women upset their loved ones. As a result, women may try to reinforce these relationships as they go through the menopausal transition.

- **Starting an exercise regimen.** In the concept of improving physically emotionally and mentally, a woman might resort to exercising with friends in order to get fit and have fun.

- **Making Healthy Dietary Changes.** Handling the symptoms of menopause requires keeping the body in top form. This helps to control some of the menopause symptoms such as fatigue, mood swings, headaches...

- **Lifestyle Management and Planning Retirement.** Menopause transition might be a good time for some women to evaluate physical and financial health leading to a positive lifestyle change and a sense of accomplishment.

**History and evolution of Menopause products:**

1930's

Estrogen has been indicated as part of a hormone replacement therapy that aims to raise the hormones to premenopausal levels as to alleviate some of the main symptoms that women experience during menopause.
1960's

The number of women under hormone replacement therapy grew as well as the concern for women's health since speculations about harmful effects of hormone treatment came to light.

1970's

As a result of this rising concern, two studies linked estrogen to endometrial cancer. Hormone Replacement Therapy became subject to further research which resulted in some modifying this techniques. Researchers discovered that adding progestogen to estrogen reduced the cancer risk. However in 1977, evidence that taking hormones may cause breast cancer, strokes and blood clots. Hence, the need for new products to help women alleviate the upsetting symptoms of menopause was taking form. In contrast, further studies tried to prove that HRT may carry benefits for the heart rather than diseases.

1980's

HRT, being FDA approved (ever since 1941) for treating menopause symptoms and osteoporosis, became increasingly adopted as the main menopause treatment. The efforts made to make HRT a remedy for heart disease did not pay, FDA rejected heart disease prevention from the list of approved uses.

1998

HERS study confirmed that women with heart disease had worse outcomes if under HRT than those that are not. But still the widespread use of HRT was not affected.

2002

Women's Health Initiative revealed evidence that HRT increases the risk for breast cancer, heart disease and strokes and the numbers of HRT
significantly dropped giving way to other menopause products and alternative treating methods.

Today, alternative therapies to HRT are being developed. Natural organic food supplement, diet, daily vitamin dosage, exercising and living a healthy lifestyle can all be beneficial in terms of relieving menopausal symptoms. Although their risks and benefits are blurred, they seem to work well under the supervision of health care professionals.

About Manhae:

Manhae is the only non-hormonal solution for Menopause positioned as a unique 3rd generation remedy. Its producer Nutrisante, which has its head office based in France, was able to come up with an exclusive formula based on natural ingredients to treat the effects of menopause and avoid the negative effects of the traditional methods described above.

With its unique formula, Manhae is able to treat many of the Menopause reported symptoms:

- Hot Flashes & Nocturnal sweating.
- Anxiousness.
- Mood swings, stress.
- Sleep problems.
- Fatigue.

A simple but elegant package design catches and draws women's attention towards the product's usefulness and efficacy which gets them interested in reading about this unique product.

The packaging is oriented towards the consumer's needs for discretion and womanly appeal. The word menopause is not displayed on the front side of the
package.

It consists of a simple box that carries information about the product. The package also considers the information to be displayed on the ideal side based on a specially made study of a focus group of 10 women between 45 and 55 years old and their preferences for this matter.

(Ref 3)
Manhae Clinical trials & efficacy

- Efficacy Testing Method:

Nutrisante laboratories tested Manhae by recruiting the help of gynecologists who were asked to distribute a sample of Manhae to their patients along with 2 questionnaires that provide an assessment of the enhancement of 15 reported symptoms of Menopause.

The finished questionnaires were submitted to “Centre de Gestion des Essais Cliniques de Nantes” for analysis.

- Efficacy Test Results:

On a population of 101 volunteers with an average age of 53 years old, results show enhancement in 14 out of 15 studied characteristics - apatite remains unaffected.
Enhanced characteristics

Enhancement

- Apatite
- Good
- Attractive
- Abdomen
- Breasts
- Legs
- Sweating
- Dryness
- Pains
- Fatigue
- Sleep Trouble
- Skin
- Hot Flashes
- Dizziness
- Melancholy

Enhancement

- Apatite: 0%
- Good: 63%
- Attractive: 39%
- Abdomen: 55%
- Breasts: 41%
- Legs: 51%
- Sweating: 65%
- Dryness: 42%
- Pains: 50%
- Fatigue: 75%
- Sleep Trouble: 66%
- Skin: 66%
- Hot Flashes: 63%
- Dizziness: 48%
- Melancholy: 64%
Other Menopause Solutions:

Menopause occurs at the natural end of a women's reproductive life. The different symptoms that women experience from menopause range from minor problems to ones that affect the quality of their lives. Stress and anxiety make it harder to cope with the changes followed with uncertainty that bounces women between feeling liberated and feeling miserable and depressed.

However, the distressing symptoms can be treated using either traditional treating methods or alternative treating methods.

Traditional Menopause Treatments:

- **Hormone Replacement Therapy (HRT)** is usually thought of as Estrogen replacement therapy however, the body looses more than one type of hormone during menopause. Estrogen replacement therapy is the main treatment for menopause, it relieves hot flashes and vaginal dryness, but on the other hand, the longer is HRT used the more it can increase the chances of getting breast cancer, blood clots, and heart disease and stroke risk.

  *Progestins* are another hormone replacement therapy method with the aim of replacing progesterone with synthetic Progestins made to react similarly to the body.

- **1500 mg calcium daily**: Calcium plays a very important role in all the body functions. It is involved in the development and health of bones and it helps protecting the body against bone loss, the national institute of health recommends that adult women should try to maintain an intake of 1500mg of calcium daily after menopause.
• **Anti-anxiety drug therapies** such as Anxiolytics and mild-sedatives, also known as "minor tranquilizers", are used to treat and prevent anxiety disorders. They have to be prescribed by a trusted and trained professional. Though the use of these drugs today is less common, they can be beneficial for women that failed to reduce anxiety that is not relived with natural self-care and other alternative techniques.

• **Antidepressants** are mainly divided into four types: Tricyclics, MAOI's, SSRI's and SNRI's. Studies have shown that two of these types may have beneficial effects on menopause symptoms and can be used to treat them. SSRI (selective serotonin reuptake inhibitors) and SNRI (serotonin and norepinephrine reuptake inhibitors) are found to specifically reduce hot flashes and mood swings.

**Alternative Menopause Treatments:**

• **Herbal remedies** such as black cohosh, red clover, evening primrose. Under controlled studies, red clover has proven to have a significantly positive effect on the rate of bone loss and cardiovascular health. In addition, it may offer some protection against breast and endometrial cancer. The research made by the Journal of the British Menopause had also shown evidence that red clover may enhance other menopause symptoms such as hot flashes which is one of the most common symptoms of the peri-menopausal and menopausal symptoms to be reported.

• **Compounded prescribed hormones** - estrogen, progesterone, and testosterone, available by a prescription from compounding pharmacists. These compounded hormones are bio-identical, meaning that they are chemically equal to the estrogen naturally produced by the body. The three types of estrogen commonly used in bio-identical hormone
replacement therapy are: Estrone, Estriol and Estradiol. These are combined and compounded to produce natural or bio-identical estrogen compounds.

- **Over-the-counter natural progesterone** is an important component in menopausal symptom management for women. The cream product form has some advantages over the oral form; a lower dose is needed since it does not need to be metabolized by the liver and nearly has no side effect such as irregular bleeding and fluid retention.

- **Diet** is an important tool for controlling menopausal symptoms. Therefore, the range of food is to be avoided includes high amounts of caffeine and carbonated beverages which can increase stress and intensify sleep troubles in addition to the amounts phosphorus which increase bone loss. Low sugar intake is advised since high amounts limit the liver’s ability to metabolize estrogen and weakens the immune system. The diet also includes reducing the amounts of saturated fats which come from the consumption of commercially raised meats (beef, pork, chicken…) since they can decrease the body’s ability to metabolize estrogen as well. On the other hand, food with concentrated levels of phytoestrogen including soy is to be increased along with natural organic food such as grains, wheat, brown rice, tofu, almonds, cashews and fresh fruits and vegetables.

- **Exercise** is another way to treat menopause symptoms since it allows women to improve their overall health and well-being. Regular exercise strengthens bones and reduces bone loss, reduces risk for many types of cancer and reduces risk of heart disease.

- **Vitamins** including Vitamin E 400 to 800 IU daily, B6, B complex. The book, Medicinal Herbal Therapy: A pharmacist’s view point, by registered
pharmacist Steven G. Ottariano, explains that certain vitamins and minerals can be beneficial to menopausal women. For instance, Vitamin E (400 to 800 IU daily) can help reduce hot flashes and night sweats; Vitamin C (1,000 mg to 2,000 mg daily) decreases capillary fragility and enhances the absorption of vitamin E; Calcium helps in reducing bone loss combined with Magnesium which facilitates and increases the absorption of Calcium.

Many more methods are being developed for treating menopause symptoms and relieve women from the distress these symptoms can cause them. Each of these suggestions works differently for various women. Hence, women have to take the time to find out which of these treatments or combination of treatments works best for them.

C-Business Background

About Abela frères s.a.i.

Abela frères s.a.i. was established in 1927 as a family owned firm importing and distributing pharmaceutical products in Lebanon and the Middle East. The company is headquartered in Beirut, Lebanon and employs 90 personnel. (Ref Abela Oficial Website).

In 1997, it was restructured as a privately owned stock company whereby its shares were allocated to the parent holding Holmed, top managing directors and other external shareholders.

Throughout the years the company’s key success factor was its commitment to providing high integrity and excellent partnership to its suppliers.
and customers in the aim of leading the healthcare distribution market. It committed itself to using all necessary resources, whether human or technological, towards achieving this goal. The company holds ISO 9001-2000 certification by the British Standard Institution BSI.

Building on proven success in the pharmaceutical industry backed by the information technologies experience gained from its sister companies and supported by its financially strong holding parent, it was able to establish a state of the art Pharmaceutical Distribution Network.

Following is the current distributorship portfolio:

- In the pharmaceutical field: GlaxoSmithKline, Schering Plough, Merck Serono, Baxter Oncology, and MedaPharma.
- In the nutritional field: Nutricia’s ECN products, and Groupe Ponroy Santé.
- In the paramedical field: Littmann-3M.

Concerning its financials, its 2006 Sales amounted to USD 38.6 Millions and 2007 forecast was USD 49.9 Millions.
About Nutrisanté Laboratories:

Nutrisanté laboratories' head office in France emphasizes on the effectiveness of single or combination of nutrients on our health along with an ongoing research into new processes and properties of the ingredients as to achieve higher performance.

High-tech food supplements based on natural organic material are produced using cutting edge scientific and medical data at the base of the nutritional approach, researchers at Nutrisanté laboratories work on "natural health" concept.

• Philosophy:

The aim of Nutrisanté Laboratories is to associate between nutrition and health.

Studies increased the knowledge about human metabolism and shown that only highly metabolizable natural molecules can act effectively to reestablish the fundamental biochemical balance.

Nutritherapy investigates diseases that are related to metabolic disorders and aging preventions.

The products are subject to the quality standards of the pharmaceutical industry function and specific qualities and are equally ecological based on respect for the human beings and their environment.

• History:

In 1975, Doctor YVES PONROY demonstrated the long chain polyunsaturated fatty acids (LC-PUFA) with respect to central nervous functioning. Scientific studies confirmed that these phospholipids interfere by
increasing the regeneration of cell membranes and improving the circulation of information in the brain.

In 1978, Doctor PONROY, decided to create a Biological Research Laboratory. With the help of leading European research institutes, he was able to develop Nutritherapy products and prove these products effective by a program of clinical studies.

For the last 25 years, clinical studies were being conducted by physicians in hospital or office practice which led to advances in science and revealed very worthwhile information about how the human body operates.

As a result of ongoing research and collaboration with research bodies, as a result of prioritizing the aim for sound and innovative work, the Research and Development Department, a team of pharmacists, engineers and biologists, was able to publish high quality work in some well known scientific journals and most importantly, led the government and health professionals to approve on the reliability of Nutrisanté’s products.

Now, Nutrisante Laboratories have more than 200 Nutritherapy and Phytotherapy pharmaceutical quality products that meet of today’s health concerns.

(Ref 4)
• **Nutritherapy:**

The western eating preferences tend to have excessive amounts of fat and sugar which overwhelm and drain the human body. Deficiencies are created from excessively refined foods that deprive the body of essential elements that can be acquired from organic and natural food. Over time the body becomes vulnerable and susceptible to disease. As part of the Nutritherapy, food supplements are used as means to remedy for the over-consumption of artificial molecules that temper with the metabolism's stability.

They consist of vitamins, minerals, amino-acids and nutrients and significantly reduce nutritional deficiencies with the aim of restoring balance to the metabolism.

• **Food supplements:**

Food supplements compensate for the over-consumption of artificial molecules which jeopardizes the metabolism's stability. They derive from natural sources such as plants and animal products (fish, oil...) and are intended to restore the stability of the metabolism by supplying it with the natural elements it is lacking due the unbalanced diet.

• **Production Technique & Technology:**

Specialized in developing natural molecules with beneficial effects on the human body, research teams are assigned to study and investigate natural active ingredients as to identify those with particular health improving qualities, extract and purify them in order to have a concentrated active component, and formulate
a safe and useful product of combined active natural ingredients that meet a certain health concern while being responsible for production quality and control of the specialized products.

MARKET ANALYSIS

A. General Market and Consumer Trends

Menopause market is one that is constantly growing. As women age, demographic numbers kick in. Menopause symptoms usually start with women in their late 30’s and early 40’s and become increasingly more intense as women age. By looking at the country’s demographics, a pretty accurate estimate can be made of the market size and potential market. In Canada alone, women between 35 and 45 years old were accounted for 19.65% of the Canadian population in the year 2005 (which is around 6 million women) therefore, target market is huge and has an excellent growth potential since every year new women enter this age bracket and demand is constantly renewed. It is a multi-billion dollar global industry increasing at a virtually indefinite rate. (Ref 5)

In the US, women who used estrogen replacement therapy accounted for 15% to 20% of menopausal women around the year 1994. Some women were
concerned over conflicting studies about the negative side effects of HRT. "Wyeth-Ayerst" spent over $9.2 million on advertising their product in women magazine back in 1992. They had recognized the potential of this market and reacted to it thus becoming one of the leaders of the industry in the US and national markets. (Ref 6)

After Women's Health Initiative's findings in 2002, HRT users dramatically declined. In the US, 36% of HRT users stopped in 2002 as compared to 8.4% in 2001. Estrogen-only users were also discouraged and stopped HRT therapy as well registering a 22.6% decrease as compared to a 9.5% decrease in 2001. This in fact gave way for the alternative menopause treatments as substitutes for the HRT and traditional methods to acquire the newly found market share. (Ref 7)

Hence, the trend in menopause markets seems to be towards alternative treatments. An increasing number of women seem to be agreeing on the fact that alternative remedies for the fact that they do not claim to cure menopause, just relief the symptoms instead and with no risk of getting cancer or heart disease. (Ref 8)

Women's pharmaceutical health care market is estimated around $70 billion which is an impressing number for anyone who wishes to enter the healthcare market. (Ref 9)

Modern menopause treatment takes into account the concept of natural health. Dietary supplements and natural topical agents have become extremely popular, but their use is often questioned by conventional medicine. An appropriate argument has emerged that alternative menopause treating methods must be evidence-based and not merely fall into the category of Menopause "remedies".
Evidence that adverse lifestyle intensifies menopause symptoms is now crystal-clear. However, the investment in “behavior change today for health tomorrow” requires much incentivization. Correction of adverse lifestyle will do more than just relieve the symptoms. Women would prefer to avoid increasing the risk of heart diseases and strokes and still be able to relieve the menopause symptoms.

The main boost to the sale of alternative methods for treating menopause products will come from public education where the symptoms of menopause become day after day better understood. The alternative menopause products industry should be able to provide an incentive to strive for a healthier lifestyle.

Complementary and alternative medicine therapies, are becoming increasingly popular. Dong quai, oil of evening primrose, black cohosh, and ginseng are some of the most commonly used herbal remedies. However, these therapies are not risk free. Studies on this matter are controversial. Some say they carry discomforting side effects such as headaches and intestinal discomfort. Though it is still not clear whether any of this is true, the risk that women take when under alternative treatment is much less than with the traditional treating methods.

Economic struggles materialize a new issue in our country’s financial health. It may cause some less affected women to avoid treating menopause. The consumers will further educate themselves to choose products and solutions that are economical and best-suited to their specific needs. On the other hand, menopause is a healthcare issue and many will feel the need to prioritize this problem above others.

Despite finances, focus on menopause treatment will continue to grow, since no woman would rather suffer the symptoms as long as there can be some way to relieve them. HRT, anti-anxiety drugs, anti-depressants and other
traditional methods carry some high risks for a woman to feel relieved. Products that help women feel better and provide actual relief from the comfort of their home will become the focus of the menopause treatment industry. Women want to see improvement in their lifestyle, without a large economic or physical expense.

Men and women alike are finding it more important to stay competitive and on top of their game in the business world today without feeling and looking young. Given society's emphasis on youth and wellbeing, business executives and home makers alike are discovering the increasing importance to adopt a healthier lifestyle for a more sustainable future.

Even in a suffering economy, individuals cannot bring taking care of their health to an end and will continue searching for better treatments. One of the major benefits of complementary and alternative medicine (CAM) treatments is that there are no real discernible signs of life threatening risk.

We may expect to see alternative-healthcare medicine industry take off as consumers are tightening their belts in an economic downspin. Everyone is downsizing—they may put off having to visit the therapist on a more regular basis for prescriptions and checkups and choose instead to go with a natural organic diet along with exercise...

Most consumers, who buy into the concept of alternative treatment medicine, believe that they are reducing risk and improving their health. They may need to overlook some minor discomforts if the aim is to ultimately reduce the risk of getting heart disease and breast cancer. Consumers may turn to less pricey brands now, such as moderate priced products.

More people are using alternative medicine because it represents regret from traditional medicine. According to the Journal of American Medical
Association, in 1997, 47% of Americans surveyed used therapies outside the traditional medicine mainstream. The institute of alternative future predicts that by the year 2010, 66% of Americans will be using one or more alternative medicine approaches. (Ref 10)

In this respect, alternative menopausal products are expected to be a booming sector in next few years. Studies such as WHI previously spoken of have shown that traditional treatment methods have more risks than benefits. For this reason, the trend towards menopause CAM methods is subject to a sharp increase.

Consumers tend to be less elastic with the price of the product when it comes to caring for their health. While results vary depending on various variables, as long as products are delivering the results as they promise, consumers are compelled to buy regardless the price.

Innovation is an extremely important feature in any industry. Companies strive to lure customers with eye-catching new developments. Target markets are now sophisticated and companies are encouraging women to use higher valued products and they are also targeting consumers who are perimenopausal, menopausal and postmenopausal with the aim of wrapping the greater market share. Complementary and Alternative Medicine is the innovation that companies in healthcare industry need. It is a trend in the making and it provides the products that are setting the trend for others to follow.

Alternative Treatments may be unproven and unregulated but they seem powerfully charming. They tend to make people feel self reliant, added to the feeling of spiritual and physical relief using natural age-old cures and remedies. (Ref 11)
A. The Lebanese Market

"Complementary and alternative medicine (CAM) is a term for the group of medical systems, practices and products – things like homeopathy and acupuncture, and even yoga and meditation – that are not presently considered to be part of conventional medicine".

In Lebanon, CAM treatments are becoming increasingly available even though the medical establishment is still skeptical; the private sector on the other hand seems to be open to the concept.

Abdul R. Merhi is a homeopathic pharmacist for over 14 years in Lebanon, according to him, most people turn to CAM for minor ailments or ailments with obvious emotional aspects. "Most of my customers come for stress, or for food intolerances," he said; a good reason for which the product chosen has a potential in the Lebanese market. (Ref 12)

According to the Lebanese Pharmaceutical Import Association (LP/A), ABELA ranked in the top 3 members with a 7% market share in 2006. A 12% market share difference between ABELA and the leader MERSACO indicates that ABELA has to face some fierce competition.

On the other hand, the product itself will have to compete with the other alternative treatment methods and face the threat of the substitutes, the traditional treatment methods.

The numbers and statements in Part A, General market and Consumer Trends, show that the threat of substitutes was affected by a general trend towards alternative treatments and Lebanon is no exception. Anti-depressant & anti-anxiety drugs have many side effects that women would rather avoid. Moreover, WHI study proved HRT to have more risks than benefits. For the
negative side effects that include the traditional treatment methods, threat of substitutes is reduced.

In Lebanon, local doctors prescribe mainly some anti-depressant and anti-anxiety drugs, estrogen creams and osteoporosis medicament as remedies for menopause. Some soy based products can be found in the market but since the soy based products were proven to have similar effects to the HRT; their supply and demand is very limited.

Lebanese market is still a fresh one for menopause products. Since very few menopause products exist, women do not have a good variety of choice. They are forced to resort to their doctors or pharmacists and ask for a treatment or medicine instead of being able to try one from the market by themselves. And since doctors and pharmacies have traditional medicine on their hands, the result would be a prescription for a bundle of drugs to buy including vitamins, sleeping pills (anti-anxiety), anti-depressant and osteoporosis medicine.

According to "The Lebanon Pharmaceuticals and Healthcare Report 2008" by Business Monitor International (BMI), (Ref 13) the following were forecasted for year 2008:

- Over-the-counter (OTC) drugs, which presently account for approximately 10% of the total by value, are expected to continue increasing year after year.

- BMI forecasts that the Lebanese drug market will be worth US$605mn at retail prices by 2013, up from US$475mn in 2006.

- The pharmaceutical market generates around $400 million every year in retail sales. The network of distribution outlets is large and diversified. Apart from dispensaries, there are around 1,405 independent pharmacies and hospital-based pharmacies.
• Drugs imported for pharmaceutical use constitute between 92 and 95 percent of the total available in the market. In 1999, $275 million worth of pharmaceutical drugs were brought in. The number went up to $280 million in 2000 and to $294 million in 2001, which generated some $7 million worth of Customs duties. In 2008, Lebanon’s pharmaceutical market continued to grow; it generated US$500mn and is expected to grow to US$517mn in 2009.

• Lebanon is the leading importer of pharmaceutical drugs in the region. Some 5,976 types of drug are imported from more than 508 factories in 25 countries. There are close to 50 companies that import pharmaceuticals.

The trend for alternative medicine is fueled by the rise and advertisement companies such as AMANA CARE and ZEI N. It would be appropriate to launch a product that goes with this trend while being cheaper, safer and easier to get and tend to the needs of the women in Lebanese market to relieve menopause symptoms without having to go to the doctor and getting a prescription or having to order the treatment from outside. The lack of such products in the Lebanese market is an opportunity to exploit.

B. Demographics of Lebanon

During the past three decades, fast declines in fertility and mortality in Lebanon have created a compressed demographic transition, a growing trend towards survival into later life, and a larger proportion of elderly people in the population. Projections show that people aged 65 years and over are expected to constitute 10.2%.

### Demographic Highlights

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population Mid-2025 (projected)</td>
<td>4,598,000</td>
</tr>
<tr>
<td>Population Mid-2050 (projected)</td>
<td>5,018,000</td>
</tr>
<tr>
<td>Population Change 2008-2050 (projected %)</td>
<td>26</td>
</tr>
<tr>
<td>Population Gain/Loss, 2008-2050</td>
<td>1,037,000</td>
</tr>
<tr>
<td>Population Age &lt;15 (%)</td>
<td>27</td>
</tr>
<tr>
<td>Population Age &lt;15</td>
<td>1,083,000</td>
</tr>
<tr>
<td>Population Age 65+ (%)</td>
<td>8</td>
</tr>
<tr>
<td>Population Age 65+</td>
<td>299,000</td>
</tr>
<tr>
<td>Life Expectancy at Birth, Females (years)</td>
<td>74</td>
</tr>
<tr>
<td>Women Population</td>
<td>50.15%</td>
</tr>
</tbody>
</table>

### Indicators on Women

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Women Ages &lt; 15, 2005 (%)</td>
<td>27</td>
</tr>
<tr>
<td>Women Ages 15-49, 2005 (%)</td>
<td>56</td>
</tr>
<tr>
<td>Women Ages 50+, 2005 (%)</td>
<td>17</td>
</tr>
</tbody>
</table>
Lebanon’s population consists of mainly young people: 28% of people are less than 15 years and 23.8% of the people are 10 years to 24 years of age. Lebanese people enjoy very high literacy rate of about 95% (as per 2005 estimates by Population Reference Bureau). This means Lebanon potentially has highly skilled labor within the country itself.

**Figure 16: Population Structure (2005)**

Source: Population Reference Bureau

*Population Reference Bureau. (Ref 15)*

**Age Structure:**

- **0-14 years:** 26.7% (male 520,270; female 499,609)
- **15-64 years:** 66.4% (male 1,216,738; female 1,324,031)
- **65 years and over:** 6.9% (male 120,176; female 145,194) (2005 est.)

*CIA World Factbook Ref 16*
The above graphs indicate that the greater percentage among women age bracket are those aged between 15 and 49, and those above 50, account for 17%. In fact, women in their late 30's and above 40 are those who use menopause product, so therefore a good portion of the market can be targeted.

III. Methodology

Market survey

I have conducted a survey over a sample of 101 menopausal and perimenopausal women from different regions in Lebanon. The intention was to gather data on attitudes, impressions, opinions, and satisfaction level of these women on various menopause treatment methods. This survey was used to validate different hypothesis and to gather qualitative data in order to formulate the best conclusions and come out with the most successful and safe launching strategy. The surveys were based on one to one interview with each woman who filled the questionnaire personally.
The results were fed on SPSS forms and the results were illustrated in Excel regressions and models.

**Hypothesis formulation**

The research’s aim in this thesis is to validate different hypothesis concerning the probable success or failure of the product after its launch in the Lebanese market. Therefore, I have tested the correlation between two major dependant variables: Success of the product (X1) measured by the willingness to purchase the product and that is after explaining the product to the interviewed women and showing them a sample of the product (illustration on page 13).

The second dependant variable (X2): Ability to purchase the product.

These two dependant variables if validated will guide the marketing strategy and the financial projections that will follow by identifying the target segments and the approach that should be followed in order to reach the maximum target audience of the target segment. Referring to the paper wrote by Michael W.M. Roos (Universität Dortmund-2004) entitled “Willingness to consume and ability to consume” (Ref 17), Mr. Roos discusses the difference between these two variables and tests the effect of each variable on consumer behavior, the main conclusion was:

“The empirical evidence rejects the permanent income hypothesis and supports the willingness-to-consume model.”

Noting that the latter study diminishes the importance of our second dependant variable (X2), still for the sake of added assertiveness we will test those two variables that are the main parameters of consumer behavior.

The first dependant variable will be tested with four major independent variables in four major hypotheses: H1, H2, H3 and H4. The second dependant variable will be tested with two major independent variables in two major hypotheses: H5 and H6.
First Hypothesis

According to the study by Minkin, et al. (1997), *What Every Woman Needs to Know about Menopause, Yale University Press* -(Ref 18) women in the age range of 45 – 50 are most likely to feel uncomfortable with the symptoms since they move from the perimenopausal stage to the menopausal stage in which the menstruation cycle becomes completely inactive and the low rates of hormones start having secondary effects. Moreover, since there are no reliable sources on age groups of women who tend to consume more menopausal women (in the premenopausal – menopausal and postmenopausal stages) then we can conclude that the period in which women are more likely to consume menopausal products is the period in which symptoms become the most unbearable ie. 45- 50. That conclusion is backed by the heavily tested and researched theories of consumer behavior that indicates that consumers would follow their needs as their first drive to buy any product. Lars Perner, in his paper entitled *CONSUMER BEHAVIOR: THE PSYCHOLOGY OF MARKETING, University of Southern California, 2006.* (Ref 19) states that “There are four main applications of consumer behavior...The most obvious is to understand that consumers are more receptive to food advertising when they are hungry.”

Therefore our first Hypothesis is *H1: Women aged from 45 – 50 are more likely to buy Manhae.*

Second Hypothesis

According to the study by K.Modelska, S.Litwack, S.Ewing, K.Yaffe *Endogenous estrogen levels affect sexual function in elderly post-menopausal women* Maturitas, *Volume 49, Issue 2, Pages 124-133* (Ref 20). Its main conclusion is: “After 3 years, women with $E_2 \geq 20$ pmol/l had significantly less decline in sexual
enjoyment (P<0.02), satisfaction (P<0.02), sexual comfort (P<0.05) and sexual feelings summary score (P=0.001), when compared with women who had E₂ levels <20pmol/l. This biological fact can lead us to a business conclusion which is that married women or more specifically sexually active menopausal women are more likely to use menopausal products since this would affect their sexual life. Therefore our second hypothesis is:

**H2: Sexually active menopausal women are more likely to buy Manhae.**

**Third Hypothesis**

According to the article conducted by Dr. Cathy Taylor, Lack of concentration – How hormonal imbalance at menopause causes confusion, health and fitness – women issue, January 2008 (Ref 21). Menopause has high impact on concentration and that is mainly led by the hormonal imbalance, the article concludes that: "Menopause closely correlates with some decline in mental functions such as memory loss and the ability to clearly concentrate."

Therefore it is interesting to study the cluster of working or professionally active menopausal women and check if they actually represent a bigger purchasing potential than those who are professionally inactive. That is also led by the consumer behavior basic theory which is the need to purchase a product that will improve their lifestyle and their performance at work. Our third hypothesis would be:

**H3: Professionally active menopausal women are more likely to buy Manhae.**

**Forth Hypothesis**


The main conclusion was the following: “41% of responders indicated that they consult medical doctor before using an OTC analgesic and only 23% consult pharmacist. For 22% more important were the recommendations by family
members and/or friends, and 6% were influenced by the advertisements. 8% made their choice without consulting anyone or their choice was based on their own experience. This study is of a huge importance since it illustrates the consumer behavior of people toward Doctor's prescription, pharmacists and other means. Moreover, the study is conducted on Analgesics which is considered as a minor drug in other terms an OTC drug, this being said, doctor's prescription was given the bigger percentage 41% which clearly indicates the importance and the trust that is given by patients to doctors and the huge impact that doctors have on patients choice of drugs.

Another interesting report about consumer behavior on drugs reference in the Lebanese market is the one conducted by BMI the leading world report. In their issue of the 3rd quarter of 2009, BMI illustrated the following:

**Value of OTC and Prescription Drug Markets**

2003-2013

![Graph showing the value of OTC and prescription drug markets from 2003 to 2013.](graph.png)


The above graph clearly shows an increase of the OTC market potential; however the prescription market is also rising and constitutes a much bigger volume.

All the above would make it interesting to test the response of women to doctor's prescription, pharmacist prescription and other referrals. After reviewing the
Lebanese report and the above study it would be wise to formulate the following hypothesis. (Ref 23)

**H4: Menopausal Women advised by doctors are more likely to buy Manhae.**

**Fifth hypothesis**

Moving to our second dependant variable which is the ability to pay for the product; According to the market study I have conducted on current menopause products, I came out with the following table.

<table>
<thead>
<tr>
<th>PRODUCT</th>
<th>UNITS</th>
<th>DOLLARS ($)</th>
<th>GROWTH +/-</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELUGYN (PIERRE FABRE)</td>
<td>3,200</td>
<td>71,000</td>
<td>11%</td>
</tr>
<tr>
<td>ALICAGYN</td>
<td>5,000</td>
<td>33,000</td>
<td>71%</td>
</tr>
<tr>
<td>FEMINEX MENO (LA PRAIRIE)</td>
<td>528</td>
<td>7,500</td>
<td>332%</td>
</tr>
<tr>
<td>FEMME 24 (FORTEPHARMA)</td>
<td>257</td>
<td>4,100</td>
<td>3500%</td>
</tr>
<tr>
<td>EVENING PRIMROE</td>
<td>104</td>
<td>1,700</td>
<td>215%</td>
</tr>
<tr>
<td>PHYTO SOYA (ARKOPHARMA)</td>
<td>TBI</td>
<td>TBI</td>
<td>TBI</td>
</tr>
<tr>
<td>GYNALPHA (MEDEX)</td>
<td>TBI</td>
<td>TBI</td>
<td>TBI</td>
</tr>
<tr>
<td>FEMINON C</td>
<td>TBI</td>
<td>TBI</td>
<td>TBI</td>
</tr>
<tr>
<td>NUGEL (GEL)</td>
<td>4,400</td>
<td>27,000</td>
<td>175%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>13,500</td>
<td>144,000</td>
<td>38%</td>
</tr>
</tbody>
</table>

This table clearly indicates that the menopause products are expensive products and setting a price for Manhae should be in this range otherwise it may affect the image and the quality of the product.

Still it is quite essential to test the market and check how much women are able to pay for that product knowing that it should be taken regularly and for life.

This hypothesis however being simple sets the light on the pricing strategy that should be adopted. Therefore our fifth hypothesis would be:

**H5: Menopausal Women are more able to buy Manhae if its price ranges from 10 – 20 $**.
Sixth hypothesis

According to the article by Lead Kene, *Channel of Distribution, Its Importance & Types* Associated content, October 2008 (Ref 24). The pharma model follows the following channel:

“Manufacturer-Wholesaler—Retailer—Customer:

*This channel is most suitable for the products with widely scattered market. It is used in the distribution of consumer products like groceries, drugs, cosmetics, etc.*” The distribution channels insure the availability of the product in the market and are the most important factor for consumers to reach the product. In other words no consumer is able to reach the product unless it is part of a successful distribution channel. In the pharma industry, the distribution channel is quite defined and set by rules and regulations since no drug can be imported and registered unless by a licensed wholesaler and the only retailer that can sell drugs are pharmacies. Still our product is categorized as Food Supplement and not as Drug which makes parapharmacies and some licensed diet centers as other options.

Therefore it is worth testing the menopausal women preference for purchasing the product. Our Sixth hypothesis would be:

*H6: Menopausal women find it more convenient to buy Manhae from pharmacies.*
Survey Results

After conducting a survey over a sample of 101 women, the below are some illustrative graphs of the results:

**Age Brackets**

![Age Brackets Pie Chart](chart1.png)

- 37.62%
- 26.73%
- 15.84%
- 10.80%
- 6.80%

**Marital Status**

Women were asked to tick married in case they were legally married or sexually active.

![Marital Status Pie Chart](chart2.png)

- Married 89.11%
- Single 10.80%
Employment Status

34.65% Not Employed
65.35% Employed

Of the 27 employed women:

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employee</td>
<td>5</td>
</tr>
<tr>
<td>Secretary</td>
<td>1</td>
</tr>
<tr>
<td>Teacher</td>
<td>2</td>
</tr>
<tr>
<td>Nurse</td>
<td>1</td>
</tr>
<tr>
<td>Manager</td>
<td>6</td>
</tr>
<tr>
<td>Pharmacist</td>
<td>2</td>
</tr>
<tr>
<td>Author</td>
<td>1</td>
</tr>
<tr>
<td>Beauty Specialist</td>
<td>2</td>
</tr>
<tr>
<td>Doctor</td>
<td>1</td>
</tr>
<tr>
<td>Professor</td>
<td>1</td>
</tr>
<tr>
<td>Other</td>
<td>5</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>27</strong></td>
</tr>
</tbody>
</table>
Current Menopause Product Usage

<table>
<thead>
<tr>
<th>Menopause Product Brand</th>
<th>No.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effexor</td>
<td>5</td>
<td>9.80%</td>
</tr>
<tr>
<td>Marvil</td>
<td>7</td>
<td>13.73%</td>
</tr>
<tr>
<td>Vitamins</td>
<td>16</td>
<td>31.37%</td>
</tr>
<tr>
<td>Estrogen Cream</td>
<td>17</td>
<td>33.33%</td>
</tr>
<tr>
<td>Evista</td>
<td>5</td>
<td>9.80%</td>
</tr>
<tr>
<td>Fosamax</td>
<td>1</td>
<td>1.96%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>51</strong></td>
<td><strong>100%</strong></td>
</tr>
<tr>
<td>Characteristics</td>
<td>Rating (1 Most Important, 5 Least Important)</td>
<td>1</td>
</tr>
<tr>
<td>-----------------------</td>
<td>---------------------------------------------</td>
<td>----</td>
</tr>
<tr>
<td>Fatigue</td>
<td>11</td>
<td>16.62%</td>
</tr>
<tr>
<td>Sleep Troubles</td>
<td>2</td>
<td>3.08%</td>
</tr>
<tr>
<td>Hot Flashes</td>
<td>32</td>
<td>49.23%</td>
</tr>
<tr>
<td>Melancholy</td>
<td>2</td>
<td>3.08%</td>
</tr>
<tr>
<td>Vaginal Dryness</td>
<td>18</td>
<td>27.69%</td>
</tr>
</tbody>
</table>

This graph is intended to show what women really want from their menopause product and may help assess if the product tends to these needs which can be used to project the product's success and potential in the intended market.

We can see that the majority of women choose Hot Flashes as number 1 in importance (Rating = 2). Also, 26.15% agreed that Fatigue character is the third most important characteristic (Rating = 4) and a majority of 46.15% agreed that Melancholy is least important. This can be used to assess the quality of the product and therefore contribute to the pricing strategy.
Hypotheses Validation & Analysis

H1: Women aged from 45 – 50 are more likely to buy Manhae.

After informing the 101 questioned menopausal women (users or not users of a menopausal product) about the effects of Manhae and how it could reduce the impact of this aging syndrome on their daily lives, the results validated H1 at 84.5% of the age range 45 – 50 whilst other age ranges had the following percentages: “Above 50”: 33%, “40 – 45”: 50% and “35 – 40”: 43.75%. These results will directly be used in the financial projections by selecting the target segment and by estimating its size.

H2: Sexually active menopausal women are more likely to buy Manhae.

After informing the entire sample about the effects of menopause on their sexual lives and the effects of Manhae in reducing these effects, sexually active women responded better to the product at 58.8% while sexually unactive women remained at 36.3%. These results will have an impact on the marketing plan and more specifically the brochures and the ads that will be successively launched, focusing on this symptom and emphasizing the role of Manhae in treating Vaginal dryness and increasing the overall sexual satisfaction.

H3: Professionally active menopausal women are more likely to buy Manhae

After informing the entire sample about the effects of menopause on concentration and overall mental performance, professionally active menopausal women responded better to the product at 77.14% while unemployed women remained at 45.45%. This will also help in defining the potential segment and try to target it the most efficient way possible. A rough idea would be to distribute personalized...
brochures of Manhae in offices and institutions emphasizing on the role of Manhae on concentration and performance at work.

**H4: Menopausal Women advised by doctors are more likely to buy Manhae.**

From the 44 observations of women not willing to purchase the product, we have tested if they would change their mind once they are advised by a doctor, the regression showed at 95%, $p = 0.000632$, a high significance between the change of attitude due to doctors prescription, H4 was validated by confirming that doctors are the most reliable source, followed by pharmacists that showed at 95%, $p = 0.000643$, which is also a high significance of the change of attitude due to pharmacist prescription.

This will certainly involve a whole campaign targeting doctors with brand reminders, studies and heavy visits to push the prescription process and should be completed by a campaign that addresses pharmacies and direct sales strategies.

**H5: Manhae price being 10 – 20 $ is affordable for menopausal women.**

Of all the women who are willing to purchase the product, H5 was validated by the majority of 68.42% able to purchase the product at 10 – 20 $ range, while the other ranges were as follows: “20 – 30$” = 28% and “30 – 40$” = 3.5%.

The above will help us set the most adequate price in the pricing strategy below.

**H6: Menopausal women prefer buying Manhae from pharmacies.**

Of all the women willing to purchase the product, H6 was validated by a majority of 96.49 % of the women finding it more convenient to buy the product from pharmacies, while beauty institutions scored 3.51%.
The above will help us determine the channels needed in the Place section under marketing strategy.

IV. MARKETING STRATEGY

The Marketing Mix

- **Product:**

  The product aspects in marketing deal with the specifications of the actual goods or services, and how it relates to the end-user’s needs and wants. Since Manhae is an existing product and Abela frères’ duty is to launch and distribute it in the Lebanese market, product decisions such as brand name and characteristics cannot be made. However the issue here is whether or not Abela frères should choose this product to distribute in the market.

  First of all, concerning the functionality of Manhae, as described earlier in details in this paper, it’s a product used to treat and relieve menopause symptoms. As shown in section H of part II titled Product Analysis, an efficacy test has been conducted by Nutrisante Laboratories in France with the help of Dr. Jocelyne NGUYEN (Ref 25), and results show that the product enhanced almost all the symptoms. Manhae excelled particularly in enhancing Fatigue (75%), Sleep Troubles (66%), Sweating (65%), Melancholy (64%) and Hot Flashes (63%). However, the product seems to have no effect on the increased apatite symptom. Recorded enhancement for this characteristic was 0% according to the test. A minor setback: no one product can give an optimal and complete enhancement for all the symptoms of menopause since different women experience different symptoms at different levels.
Second, concerning quality according to the efficacy test shown in section H of part II titled Product Analysis, results show that Manhae was able to improve 14 out of 15 characteristics it promises efficacy for 87% of its users after only 2 month usage. Furthermore, Manhae recorded a noticeable enhancement in 5 of the most commonly experienced menopause symptoms among women. The tables show very good results.

Third, hormone replacement and soja based derivates used to treat menopause carry dangerous health risks. In terms of safety, the natural and organic base of the Manhae makes it perfectly safe. No health related risks or issues at all.

Concerning the packaging of the product, Manhae has a simple but elegant design taking into account the discretion required by women regarding the social aspect of the problem. A womanly curve design reaches for women and lures them towards the package and lights their concern. The box conveys subtlety about menopause by not displaying the word on either front or the back side of the product meanwhile it expresses the product information in a noticeable fashion, carefully displayed on the sides for the interested women to read and clearly understand what the product is about. The discretion and elegance concerns with packaging allow the product to be displayed on any shelf all the way from pharmacies to shopping malls.

*Price:

This refers to the process of setting a price for Manhae. In fact, there are many ways to price a product. We will have a look at some of them that can be applicable to Manhae and try to find the best strategy. Of course there are many other pricing strategies, however not applicable to Manhae.

- **Premium Pricing**

This strategy refers to using a high price where there is uniqueness about the product. This approach is used where a substantial competitive advantage exists. Such high prices are charged for luxuries. This strategy can be a tough step since Manhae is still not well known in the market.

- **Penetration Pricing**

The price charged for products is set artificially low in order to gain market share. Once this is achieved, the price is increased. This can be applicable to Manhae.

- **Price Skimming**

Charge a high price because the product has a substantial competitive advantage. However, the advantage is not sustainable. The high price tends to attract new competitors into the market, and the price inevitably falls due to increased supply.

- **Psychological Pricing**

This approach is used when the company wants the consumer to respond on an emotional, rather than rational basis, for example, 'price point perspective' 99 cents not one dollar. This approach is commonly used for low value products it is not advisable to follow such a strategy for Manhae.
- **Product Bundle Pricing**

A combination of several products in the same package is offered. This also serves to move old stock. This can be a good step for later stage.

- **Promotional Pricing**

Pricing to promote a product is a very common application. There are many examples of promotional pricing including approaches such as BOGOF (Buy One Get One Free). However, such a strategy can make customers perceive Manhae as a low quality or low value product.

Results, from the statistics shown in section E of part III titled Market Analysis, show that 42.62% of the women who are willing to change menopause brand will pay between $10 and $20, and 34.43% are willing to pay between $20 and $30; while 21.31% are willing to pay between $30 and $40 and the remaining minority (1.64%) will pay between $40 and $50. This means that Manhae price must fall within the range of $10 and $30; $20 could be a starting point. This of course depends on how much the Nutrisante Laboratory is willing to profit from the product.

Therefore, the price penetration strategy might be the most suitable to enter the market in the early stages. The price charged for Manhae will be set low in order to gain market share. Once this is achieved, the price will later increase gradually to $30.

Moreover, for later stages, since Abela frères distributes many other products, it can then follow product bundle pricing strategy in which combinations of several products in the same package are offered.
Place:

Place refers to where the product should be marketed, retailed and displayed for the customer to buy. In this case the product can be displayed in specialized beauty centers, pharmacies or shopping centers.

The strategy used is going to be based on the statistics of the sixth’s hypothesis which indicates that Manhae must be displayed and marketed in pharmacies, as an initial stage of deployment. On a later stage, Manhae will be introduced to licensed diet centers and parapharmacies in order to increase its availability after the increase in demand.

Pharmacies in Lebanon - 2006
Source: Pharmacists Order in Lebanon

<table>
<thead>
<tr>
<th>Pharmacies</th>
<th>January</th>
<th>February</th>
<th>March</th>
<th>April</th>
<th>May</th>
<th>June</th>
<th>July</th>
<th>August</th>
<th>September</th>
<th>October</th>
<th>November</th>
<th>December</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beirut</td>
<td>197</td>
<td>199</td>
<td>199</td>
<td>201</td>
<td>202</td>
<td>203</td>
<td>203</td>
<td>203</td>
<td>203</td>
<td>203</td>
<td>203</td>
<td>203</td>
</tr>
<tr>
<td>Mount Lebanon</td>
<td>799</td>
<td>801</td>
<td>809</td>
<td>815</td>
<td>816</td>
<td>824</td>
<td>828</td>
<td>835</td>
<td>837</td>
<td>841</td>
<td>844</td>
<td>846</td>
</tr>
<tr>
<td>North Lebanon</td>
<td>268</td>
<td>269</td>
<td>270</td>
<td>272</td>
<td>274</td>
<td>274</td>
<td>274</td>
<td>278</td>
<td>280</td>
<td>281</td>
<td>281</td>
<td>281</td>
</tr>
<tr>
<td>Bekaa</td>
<td>198</td>
<td>200</td>
<td>201</td>
<td>201</td>
<td>203</td>
<td>206</td>
<td>206</td>
<td>209</td>
<td>210</td>
<td>213</td>
<td>216</td>
<td>217</td>
</tr>
<tr>
<td>South Lebanon</td>
<td>184</td>
<td>184</td>
<td>186</td>
<td>187</td>
<td>187</td>
<td>188</td>
<td>188</td>
<td>190</td>
<td>190</td>
<td>193</td>
<td>193</td>
<td>193</td>
</tr>
<tr>
<td>Nabatieh</td>
<td>94</td>
<td>96</td>
<td>97</td>
<td>100</td>
<td>101</td>
<td>104</td>
<td>107</td>
<td>107</td>
<td>108</td>
<td>108</td>
<td>109</td>
<td>109</td>
</tr>
<tr>
<td>Total</td>
<td>1,740</td>
<td>1,749</td>
<td>1,762</td>
<td>1,776</td>
<td>1,783</td>
<td>1,799</td>
<td>1,806</td>
<td>1,822</td>
<td>1,839</td>
<td>1,846</td>
<td>1,849</td>
<td></td>
</tr>
</tbody>
</table>

(Ref 27)
• Promotion:

Promotion refers to the marketing strategy used for promoting the product and the different marketing tools such as advertising by TV, Radio, Internet, etc...

1. Promotional Strategy:
There are two kinds of promotional strategy according to (Ref 28) that we can choose from, “Push strategy”, “Pull strategy”, or a combination of both.

- **Push strategy:**
  It focuses on pushing the product on to the customer which requires the use of a strong sale force to create customer demand. The idea behind this strategy is to promote the product to retailers and in turns they will promote it to customers. Consumer promotions and advertisements are the main tools to use in this strategy.

- **Pull strategy:**
  It focuses on attracting the customer to the product and requires high spending on advertisement and promotion in order to create demand for the product. A successful Pull strategy creates demand by the consumers which will create demand by the retailers. Heavy advertisement and promotion are the tools necessary to apply this strategy.

In order to choose the best marketing strategy, a quick look at the statistics that are in section E of the Market Analysis part, will do. Results from the survey show that among menopausal women that are currently using menopausal products 54.05% are on doctor prescriptions, 21.62% have been advised by friend or family, 18.92% have been advised by pharmacists, and only 5.41% have been attracted to the product by publicity.
This means that most women use products upon doctor’s prescription this highlights the importance of promoting Manhae to doctors and pharmacists through a sales force. However a good percentage of the women hear about the product from their friends and families this might indicate that a good portion has few information and few choices about the availability of these products.

As a result, I can realize that a combination of both pull and push strategy should be worked out to make the best of the promotional campaign. That is, pushing the product on to the customer through promoting the product to retailers through a strong sales force and in turns they will promote it to customers, and also to advertise and promote heavily in order to attract the customers.

2. Target Market

According to the statistics arrived from the surveys and the validation of H1, our target market will be women over 45 years old. The consumer trends today show that women at earlier stages rarely use menopause products since most of these women have yet to experience any of the menopause symptoms, trends and market review also shows that traditional menopause medicine and hormones entail health risks, therefore peri-menopausal women are reluctant of using menopause treatment methods such as hormone based medicines unless prescribed by a doctor.

3. Advertising & Marketing Campaign

Based on the conclusions I came across earlier in this study, the following advertising and promotional tools are advised to be used to promote Manhae:

- Holding a conference to launch the product. Pharmacists and doctors, will be invited.
- Introduce the product to doctors and pharmacists through medical representatives in different areas.
- Awareness seminars about menopause symptoms and the risks of hormone treatments in several universities to promote early awareness for young ladies.
- Posting advertisements on billboards in different areas.
- Posting advertisements in magazines.
- Giving out samples of Manhae to the largest pharmacies around the country.
- Posting advertisements and flyers in pharmacies.
- Posting advertisements on TV to reach a mass audience.

* Please refer to the Projected Financial Scenario in the last part for further analysis on advertising budget.

**People:**

The final and new P of the marketing mix is people and it refers to the value our people bring to the business by providing service to customers and retailers.

Medical and sales representatives will be hired to introduce and follow up with pharmacists and doctors. A supervisor will also be hired to control and supervise their operations. These medical and sales representatives will be very well trained in order to achieve the best sales results. They will be divided to serve several areas of Lebanon so that anybody anywhere can reach Manhae.

The **supervisor’s job duties** will include the following:

- Personal visits to key doctors and pharmacies.
- Follow up on sales and medical representatives’ activities.
- Create a sale’s strategy.
- Create and implement a rotational supervision program on all the areas.
- Give suggestions and recommendations.
- Resolve disputes, if any, with doctors and pharmacies.
- Follow up on sales and medical representatives’ report, analyzing variances and spotting potential problems.
- Motivate the sales and medical representatives.
- Make double visits.
- Prepare monthly reports to the manager of the project.

The medical representatives’ job duties will include the following (Ref 28):

- Arranging appointments with doctors and pharmacists who may include pre-arranged appointments or regular cold calling.
- Making presentations to doctors and pharmacists in the retail sector. Presentations may take place in medical settings during the day or may be conducted in the evenings at a local hotel or conference venue.
- Organizing conferences for doctors, pharmacists, beauty specialists, as well as for university students.
- Managing budgets, for catering, outside speakers, conferences, hospitality, etc...
- Keeping detailed records of all contacts, which may involve database management.
- Planning work, schedules and weekly and monthly timetables.
- Regularly attending company meetings, technical data presentations and briefings.
- Keeping up with the latest clinical data supplied by the company and interpreting, presenting and discussing this data with health professionals during presentations.
- Monitoring competitor activity and competitors’ products.
- Keeping informed of new developments in the health industry, anticipating potential negative and positive impacts on the business and adapting strategy accordingly.
o Developing strategies for increasing opportunities to meet and talk to contacts in the medical and healthcare sector.

o Staying informed about the activities of health services in a particular area.

Medical Representatives' Career Path Requirements

<table>
<thead>
<tr>
<th>Positions</th>
<th>Average Visits/Day</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Doctors</td>
</tr>
<tr>
<td>Trainee</td>
<td>5</td>
</tr>
<tr>
<td>Med Rep.</td>
<td>5</td>
</tr>
<tr>
<td>Senior Med. Rep.</td>
<td>10</td>
</tr>
<tr>
<td>Product Specialist</td>
<td>12</td>
</tr>
<tr>
<td>Med Rep Supervisor</td>
<td>12 + Other tasks</td>
</tr>
</tbody>
</table>

If more than required visits for 3 months ➔ Move to the next position under the following conditions:

1- The sales representative is hitting the target of his/her region which means that the medical representative is doing his/her job of introducing the product properly.

2- Achieving growth in the number of new doctors and pharmacies.
### Benefits & Penalties

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>NSSF</td>
<td>NSSF</td>
<td>NSSF</td>
<td>NSSF</td>
<td>NSSF</td>
</tr>
<tr>
<td>Car Insurance</td>
<td>Car Insurance</td>
<td>Car Insurance</td>
<td>Car Insurance</td>
<td>Car Insurance</td>
</tr>
<tr>
<td>Title &amp; Business Card</td>
<td>Title &amp; Business Card</td>
<td>Title &amp; Business Card</td>
<td>Title &amp; Business Card</td>
<td></td>
</tr>
<tr>
<td>Fixed Salary</td>
<td>Bonus +$100</td>
<td>Bonus +$200</td>
<td>Bonus +$300</td>
<td></td>
</tr>
</tbody>
</table>

**Less than minimum required visits:**
- 1st time: $100 penalty
- 2nd time: $200 penalty
- 3rd time: Dismissal

The *sales representatives' job duties* will include the following:
- Daily visits to pharmacists for order taking, feedback, follow up, and payments.
- Reporting daily activities and feedbacks to sales supervisor.
- Coordinate with all team members and medical representatives.
- Making a professional presentation of the products.
- Creating a computerized database.
- Finding new pharmacies.
- Establishing a good relationship with all customers.
- Gather customer needs and communicate them to the company.
- Report and communicate problems to sales supervisor.
- Coordinate with storage and accountant.
### Sales Representatives’ Career Path Requirements

<table>
<thead>
<tr>
<th>Positions</th>
<th>Average Visits/Day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trainee</td>
<td>18</td>
</tr>
<tr>
<td>Sales Rep.</td>
<td>18</td>
</tr>
<tr>
<td>Senior Sales Rep.</td>
<td>20</td>
</tr>
<tr>
<td>Sales Supervisor</td>
<td>22 + Other tasks</td>
</tr>
</tbody>
</table>

If more than 20 visits/day for 3 months → Move to the next position under 3 conditions:

1. Hit the sales target to be set by the management.
2. Achieving growth in the number of new clients.
3. Achieving growth in the number of orders.

### Benefits & Penalties

<table>
<thead>
<tr>
<th>Sales Reps</th>
<th>Senior Sales Rep</th>
<th>Sales Supervisor</th>
</tr>
</thead>
<tbody>
<tr>
<td>NSSF</td>
<td>NSSF</td>
<td>NSSF</td>
</tr>
<tr>
<td>Car Insurance</td>
<td>Car Insurance</td>
<td>Car Insurance</td>
</tr>
<tr>
<td>Title &amp; Business Card</td>
<td>Title &amp; Business Card</td>
<td>Title &amp; Business Card</td>
</tr>
<tr>
<td>Fixed Salary</td>
<td>Bonus +$100</td>
<td>Salary increase on team performance.</td>
</tr>
<tr>
<td>Commission:</td>
<td>Commission:</td>
<td></td>
</tr>
<tr>
<td>1% (2 months)</td>
<td>1% (2 months)</td>
<td></td>
</tr>
<tr>
<td>0.5% (&gt;2 months)</td>
<td>0.5% (&gt;2 months)</td>
<td></td>
</tr>
<tr>
<td>Quarterly Bonus</td>
<td>Quarterly Bonus</td>
<td></td>
</tr>
<tr>
<td>If over target by:</td>
<td>If over target by:</td>
<td></td>
</tr>
<tr>
<td>10% → 5% Commission</td>
<td>10% → 7.5% Commission</td>
<td></td>
</tr>
<tr>
<td>20% → 10% Commission</td>
<td>20% → 12.5% Commission</td>
<td></td>
</tr>
<tr>
<td>30% → 15% Commission</td>
<td>30% → 17.5% Commission</td>
<td></td>
</tr>
</tbody>
</table>

### Collection Requirements:

- Less than 90% → Penalty $50 and warning
- More than 95% → Bonus $50

### Less than minimum required visits:

- 1\textsuperscript{st} time: $100 penalty
- 2\textsuperscript{nd} time: $200 penalty
- 3\textsuperscript{rd} time: Dismissal

* Please refer to the Projected Financial Scenario in part V for further analysis on the number of and the budget for personnel to be hired.
V. PROJECTED FINANCIAL SCENARIO

A. Potential Target Market

According to the demographic statistics in section C of part III titled Market Analysis, in combination with the survey results in section E also in part III, the following was concluded:

<table>
<thead>
<tr>
<th>Potential Target Market</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Population in Lebanon</td>
<td>3,925,502</td>
</tr>
<tr>
<td>Women: % of Total Population</td>
<td>50.15%</td>
</tr>
<tr>
<td>Total Women</td>
<td>1,968,639</td>
</tr>
<tr>
<td>Women Age 15 - 49 (%)</td>
<td>56%</td>
</tr>
<tr>
<td>Women age 50 +</td>
<td>17%</td>
</tr>
<tr>
<td>On a Median result, 45 and above</td>
<td>492,160</td>
</tr>
<tr>
<td>constitute</td>
<td></td>
</tr>
<tr>
<td>Women currently using and willing to</td>
<td></td>
</tr>
<tr>
<td>use menopause products</td>
<td></td>
</tr>
<tr>
<td>(in percentage)</td>
<td>65%</td>
</tr>
<tr>
<td>In figures</td>
<td>288,445</td>
</tr>
<tr>
<td>Women Willing to Switch Anti-Aging</td>
<td></td>
</tr>
<tr>
<td>Products</td>
<td></td>
</tr>
<tr>
<td>(% of those who use anti-aging products)</td>
<td>60.40%</td>
</tr>
<tr>
<td>Total Potential Target Market</td>
<td>174,221</td>
</tr>
</tbody>
</table>

1 The calculation of women aged 45 to 50 was calculated on equal intervals being 1/7 of the tranche 15 -49.
B. Potential Market Share

According to the conclusions I have made from the statistics shown and detailed in the Marketing Mix: The 5 P's of Strategy part IV, the price of the product is best to be somewhere between $10 and $30 per product. Therefore, I will take the average of $20 per product as an assumption to base my revenue projection on.

Taking the worst case scenario of 1% market share of the potential market share mentioned in the section above for the 1st year, the following was assumed:

<table>
<thead>
<tr>
<th>Market Share</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Potential Target Market</td>
<td>174,221</td>
</tr>
<tr>
<td>Average Frequency Use/Year/Woman</td>
<td>12</td>
</tr>
<tr>
<td>Average Price Per Product</td>
<td>$20</td>
</tr>
<tr>
<td>Expected Market Share 1st year (% of Potential target market)</td>
<td>1%</td>
</tr>
<tr>
<td>Expected Market Share 2nd year (% of Potential target market)</td>
<td>2%</td>
</tr>
<tr>
<td>Expected Market Share 3rd year (% of Potential target market)</td>
<td>3%</td>
</tr>
<tr>
<td>Expected Market Share 4th year (% of Potential target market)</td>
<td>4%</td>
</tr>
<tr>
<td>Expected Market Share 5th year (% of Potential target market)</td>
<td>5%</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| *After year 5, the expected growth will be 10%.
# C. Projected Profit & Loss Statement

<table>
<thead>
<tr>
<th></th>
<th>Average Financial Projections</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Year 1</td>
</tr>
<tr>
<td><strong>Expected Revenues:</strong></td>
<td></td>
</tr>
<tr>
<td>Revenues</td>
<td>$418,130</td>
</tr>
<tr>
<td>COGS</td>
<td>$125,439</td>
</tr>
<tr>
<td><strong>Gross Profit</strong></td>
<td>$292,691</td>
</tr>
<tr>
<td><strong>Less Expenses:</strong></td>
<td></td>
</tr>
<tr>
<td>Internal Installation, Décor &amp; Improvements</td>
<td>$5,000</td>
</tr>
<tr>
<td>Post &amp; Telecommunication Charges</td>
<td>$4,800</td>
</tr>
<tr>
<td>Delivery Vehicle Payments</td>
<td>$6,000</td>
</tr>
<tr>
<td>Depository &amp; Vehicle Insurance</td>
<td>$3,000</td>
</tr>
<tr>
<td>Transportation Expenses</td>
<td>$4,800</td>
</tr>
<tr>
<td>Freight Costs</td>
<td>$20,905</td>
</tr>
<tr>
<td>Electricity Expenses</td>
<td>$3,600</td>
</tr>
<tr>
<td>Generator Expenses</td>
<td>$1,800</td>
</tr>
<tr>
<td>Office Supplies</td>
<td>$600</td>
</tr>
<tr>
<td>Advertising &amp; Publicity</td>
<td>$73,000</td>
</tr>
<tr>
<td>Total Salaries</td>
<td>$132,888</td>
</tr>
<tr>
<td>NSSF</td>
<td>$31,229</td>
</tr>
<tr>
<td>Auditing, Lawyer, &amp; Consulting Fees</td>
<td>$12,000</td>
</tr>
<tr>
<td>Other Expenses</td>
<td>$3,600</td>
</tr>
<tr>
<td><strong>Total Expenses</strong></td>
<td>$303,223</td>
</tr>
<tr>
<td>Earnings Before Taxes</td>
<td>-$10,532</td>
</tr>
<tr>
<td>Income Tax</td>
<td>$0</td>
</tr>
<tr>
<td><strong>Net Profits</strong></td>
<td>-$10,532</td>
</tr>
</tbody>
</table>
D. Assumptions

In order to build the Projected Profit and Loss Statement in section C, the following assumptions were taken:

<table>
<thead>
<tr>
<th>Assumptions</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>COGS (% of Revenue)</td>
<td>30%</td>
</tr>
<tr>
<td>Average Freight Cost</td>
<td>5%</td>
</tr>
<tr>
<td>Average Inflation Rate(^2)</td>
<td>10%</td>
</tr>
<tr>
<td>Number of Vehicles</td>
<td>2</td>
</tr>
<tr>
<td>Increase in Salary/Year</td>
<td>5%</td>
</tr>
<tr>
<td>Income Tax Rate</td>
<td>15%</td>
</tr>
</tbody>
</table>

\(^2\) Inflation rate has been forecasted to be 10% for 2009 by the Economic Intelligence Unit. Source: Lebanon Opportunities, Issue 135, September 2008 (Ref 29).

<table>
<thead>
<tr>
<th>Advertising</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Media</td>
<td></td>
</tr>
<tr>
<td>TV Program</td>
<td>$25,000</td>
</tr>
<tr>
<td>TV Production</td>
<td>$10,000</td>
</tr>
<tr>
<td>Magazines</td>
<td>$1,100</td>
</tr>
<tr>
<td>Unipoles</td>
<td>1,800</td>
</tr>
<tr>
<td>Flyers</td>
<td>$1,250</td>
</tr>
<tr>
<td>Conferences</td>
<td>$1,000</td>
</tr>
<tr>
<td><strong>Total Advertising</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Total Cost/Month</strong></td>
<td>$73,000</td>
</tr>
</tbody>
</table>

(Ref 30)
<table>
<thead>
<tr>
<th>Position</th>
<th>Number</th>
<th>Salaries</th>
<th>NSSF (2%)</th>
<th>Total Salaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manager</td>
<td>1</td>
<td>$3,000</td>
<td>$60</td>
<td>$3,060</td>
</tr>
<tr>
<td>Assistant</td>
<td>1</td>
<td>$600</td>
<td>$12</td>
<td>$612</td>
</tr>
<tr>
<td>Accountant</td>
<td>1</td>
<td>$600</td>
<td>$12</td>
<td>$612</td>
</tr>
<tr>
<td>Supervisor</td>
<td>1</td>
<td>$1,500</td>
<td>$30</td>
<td>$1,530</td>
</tr>
<tr>
<td>Medical Representatives</td>
<td>2</td>
<td>$800</td>
<td>$32</td>
<td>$832</td>
</tr>
<tr>
<td>Sales Representatives</td>
<td>5</td>
<td>$700</td>
<td>$70</td>
<td>$770</td>
</tr>
<tr>
<td>Promotion Ladies ($/Hr)</td>
<td>10</td>
<td>$100</td>
<td>$2</td>
<td>$102</td>
</tr>
<tr>
<td>Office Boy</td>
<td>1</td>
<td>$400</td>
<td>$8</td>
<td>$408</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td></td>
<td></td>
<td>$11,074</td>
</tr>
</tbody>
</table>
E. Graphs

Expected Revenues

Project Net Profits
### NET PROFIT MARGIN

<table>
<thead>
<tr>
<th>Years</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>NPM</td>
<td>-0.03</td>
<td>0.26</td>
<td>0.35</td>
<td>0.40</td>
<td>0.42</td>
</tr>
</tbody>
</table>

*The profit margin tells us how much Abela trene will make for every $1 it generates in revenue.*
Revenue Distribution

Year 1

Year 2
CONCLUSIONS & RECOMMENDATIONS

As a first conclusion to be made, studies and statistics reached and mentioned in this report show that Manhae is an effective and unique product. From this point I can move forward to conclude on other variables and constraints.

Concerning demand, there seems to be a big number of women who use menopause products and all reviews mentioned earlier in this report support the idea that there is increased use of such products. The reports also support the idea that more young women are using menopause products as a precaution. Moreover, reports also show that Menopause products are not necessarily used by married women. For this reason, I have come to a conclusion that the best target market would be women between 30 and 49 years of age; 30 to 40 years old will be targeted for awareness and precaution. 40 to 50 will be targeted directly to start using the product. They can also be used in the marketing campaigns as testimonials and references to boost up to younger generation’s awareness.

The results of the statistics show that most women who use Menopause products are willing to switch brands therefore placing an opportunity for Manhae. Statistics also show that the product will face fierce competition from other well known brands. In fact, high competition and free barriers to entry give the buyer a great deal of power and a wide range of choice. However, this can be managed if effective advertising and marketing were put on Manhae. As seen previously a combination of Pull and Push strategies would make a great advertising strategy especially since most women chose the menopause brand as advised by their doctors and a relatively good, but less, percentage are advised either by their beauty specialists, pharmacist or even by themselves. Moreover, statistics also show that most women buy the menopause products from pharmacies which stress the importance of introducing the product to pharmacists and doctors through sales and medical representatives as well as
providing them with promotions. Nonetheless, other women buy their products from beauty institutes and shopping centers where the product should also be introduced and well advertised.

Concerning the pricing, we can see from the statistics that the majority of 42.62% are willing to pay between $10 and $20 and 34.43% are willing to pay between $20 and $30. This makes me conclude that the price of Manhae must fall within the range of $20 as a start, then increase gradually to stabilize at $30 maximum rate. This of course depends on how much the Nutrisante Laboratory is willing to profit from the product. However, looking back at the several pricing strategies that I have mentioned, a price penetration strategy might be the most suitable to enter the market in the early stages. The price charged for Manhae will be set low in order to gain market share. Once this is achieved, the price will later increase.

On the basis of information presented in this report, I can conclude that the product Manhae might yield good profits for Abela frères and can be a good investment, taking into consideration that I have calculated the projected profit and loss statement based on the worst case scenario; that is 1% of the market share of the potential target market. The Net Profit Margin is expected to be 26% within 2 years of operation and will hopefully reach 42% by the end of the 5th year. This profit margin will be definitely even bigger considering two variables: if the price increases to $30 and if the market share increases more rapidly. This would be very normal to happen especially that Manhae represents very competitive advantages, and the Lebanese women—becoming more and more aware and up-to-date—will definitely compare and appreciate the great value that the product is presenting. Moreover, by keeping an approximate advertising budget of $73,000, we will be massively building up the awareness of the product and we will be keeping it in the women’s minds. This will definitely help the medical representatives as well as the sales people to generate more revenues and have greater self-confidence while presenting and selling Manhae.
Finally, I can imagine the world with women who are more energetic, sleeping
tighter, with well reduced menopause effects such as hot flashes and vaginal
dryness... all this would reflect on a happier society for two main reasons: if the
women are single, they will probably enjoy a better sexual life and stay positive in
their surrounding. And if they are married, they will also be in a better mood to be
more productive, raise their kids, support their husbands emotionally and enjoy a
more intimate sexual life. This will result in a healthier family spirit; and never
forget that a healthy family makes a healthy society.
REFERENCE LIST

Ref 1

Ref 2

Ref 3
Menhae Official Website: www.menhae.fr

Ref 4
Nutrisante Official Website: www.nutrisante.fr

Ref 5

Ref 6
E. Nagourney, NYTimes; June 1, 2009

Ref 7
HRT utilization patterns change in aftermath of WHI findings, Drug Cost Management Report, August 29, 2003

Ref 8
P. Paul, The menopause market, Forget hormone treatments  "menopausal women are raiding health-food stores for dong quai and wild yams- May 2004

Ref 9
Wayne, Pa. Femme Pharma Holding Company. The treatment of Endometriosis to KV pharma company, June 2005

Ref 10
Alternative medicine: A growth industryGrowth Strategies, Feb 8, 1999

Ref 11

Ref 12
S.Crile, Unconventional medicine on the rise, NOW Staff; July 12, 2008

Ref 13
The Lebanon Pharmaceuticals and Healthcare Report 2008” by Business Monitor International (BMI); page 7
Ref 14

Ref 15
World Population Data Sheet; 2008

Ref 16
The world fact book, Central Intelligence of America – CIA 2004

Ref 17
M M. Roos, Willingness to consume and ability to consume, Universität Dortmund-2004

Ref 18
Minkin, et al., What Every Woman Needs to Know about Menopause, Yale University Press; 1997

Ref 19

Ref 20
K. Modelska, S. Litwack, S. Ewing, K. Yaffe Endogenous estrogen levels affect sexual function in elderly post-menopausal women Maturitas, Volume 49, Issue 2, Pages 124-133

Ref 21
Dr. Cathy Taylor, Lack of concentration – How hormonal imbalance at menopause causes confusion, health and fitness – women issue, January 2008

Ref 22

Ref 23
The Lebanon Pharmaceuticals and Healthcare Report 2008* by Business Monitor International (BMI); page 14

Ref 24
Lead Kene, Channel of Distribution, its Importance & Types Associated content, October 2008

Ref 25

Ref 26
Ref 27

Ref 28
*Abela HR department*

Ref 29
*Lebanon Opportunities, Issue 135, September 2008*

Ref 30
*Abela Marketing Department*

**Interviews:**
- Dr. Rita Ghossein, ex. Sales and Marketing Manager at Abela Frères sal.
- Dr. Suzanne El Khatib Wehbe, Medical Manager at Abela Frères sal.