

The National Rabit University

Faculty of Graduate Studies & Scientific Research



**Assessment of General Knowledge about Using Herbs and Over-the-counter
medicines for Weight Gain and Weight Loss among Females Attending
Private Weight Control Centers in Khartoum Locality**

**A Thesis Submitted to the National Ribat University in Fulfillment of the Requirements
for Master of Science Degree in Human Nutrition & Dietetics Program**

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بِسْمِ اللّٰهِ الرَّحْمٰنِ الرَّحِیْمِ

قال تعالى

□ وَقُلْ رَبِّ زِدْنِي عِلْمًا □

سورة طه الايه (114)

Dedication

I am grateful and thankful to ALLAH, the compassionate and merciful

I want to dedicate this thesis to

My loving parents for their words of encouragement and support for me

My sisters, my brothers, and my friends who have supported me

Throughout the process and helped me a lot with all their love.

Alaa

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All praise is to ALLAH, the most merciful and compassionate, for blessing me with the opportunity to learn and the chance to use this knowledge to benefit others

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Abstract

This study was conducted to assess the general knowledge about using herbs and over-the-counter medicine for weight gain and weight loss in addition to exercise among females attending four private weight control centers, in Khartoum Locality. It included eight types of herbs (Ginger - Cinnamon - Lupin – Green tea -Roselle -nirvana tea - Fenugreek –Millet) and four types of over-the-counter medicine (Galaxy (vardman), Yeast product (dietary product), vitamin B complex, cyproheptadine and vitamin A(vardativ.A). 100 participants were selected randomly, and included in the study. The study was conducted from (April-October 2016) for duration of approximately seven month. The data were adopted using questionnaire consisting of 28questions (which included multiple choices). Data collected from the questionnaire were statistically analyzed by using SPSS Version 16.0 by using chi-square test.

It was found that, from 100 women who participated in research, (73%) were university graduates, (15%) above university level and (52%) of them their level income was (1000-3000) SDG/month.

Forte percent of participants used herbs in addition to exercise while (33%) did not use herbs and (27%) of them used herbs some times. (59%) of herbs users were satisfied and found positive results when they use it. However, (18%) were not satisfied but use it and (20 %) stated that the reason of un-satisfaction is because they tried herbs according to former experiments of other people and (14%) said they tried herbs but were not satisfied with the results. (26%) of herb users have used ginger, (18%) used cinnamon, (12%) used green tea for weight loss.

(80%) of participants didn't use pharmaceuticals products for weight control while (15%) used it and (5%) of them have used it sometimes. (59%) of participants didn't use these pharmaceuticals products because they see them as harmful more than beneficial, (12%) stated that these products are not available. (7%) of the users have used yeast products (dietary product), (6%) used galaxy (vardman).

(43%) of participants were found to have few knowledge of food quantity and quality specialized for them while (40%) of them said they did not have any knowledge.

It is concluded that this sample of women attending private weight control centers has a good knowledge about using herbs in addition to exercise and they were convicted to use herbs for weight control instead of use of pharmaceuticals products, and they have a good knowledge about best quantity and quality of food according to their needs.

ملخص البحث

أجريت هذه الدراسة لتقييم الوضع المعرفي عن استخدام الاعشاب والمستحضرات الصيدلانية بالاضافة الى ممارسة الرياضة للرياضه للنساء اللاتي يرتدن اربعة مراكز لضبط الوزن بولاية الخرطوم. تتضمن هذه الدراسة ثمانية انواع من الاعشاب(جنزيبيل – قرفه – ترمس - شاي اخضر- كركدي - شاي نيرفانا – حلبة - دخن) واربعة انواع من المستحضرات الصيدلانية (جلكسي – اقراص الخميره – فيتامين أ – فيتامين ب المركب) التي تستخدم لزيادة ونقصان الوزن بغير وصفة طبية, شملت المجموعه المستهدفه 100 من النساء اللاتي تم اختيارهم عشوائيا . تمت هذه الدراسة في فترة (ابريل-اكتوبر 2016) لمدة سبعة اشهر. تم جمع البيانات باستخدام الاستبيان حيث يتكون الاستبيان من 28 سؤال (اسئله متعددة الاختيار), وتم تحليل الاستبيان احصائيا بواسطة برنامج تحليل احصائي ولقد وجد ان (73%) مستواهم التعليمي جامعي و (15%) فوق الجامعي , (52%) مستوى دخلهم (1000-30000) جنيه سوداني.

(40%) من المشاركين في الدراسة كانوا يستخدمون اعشاب لضبط الوزن بالاضافة الى ممارسة الرياضة (33%) كانوا لا يستخدمون الاعشاب بينما (27%) استخدمونها احيانا ,و وجد أن (59%) لديهم قناعه تامه باستخدام الاعشاب ويجدون نتيجة ايجابية عند استخدامها ,بينما كان (18%) غير مقتنعين باستخدام الاعشاب ولا يرون نتيجة ايجابية عند استخدامها و (20%) من هؤلاء كان السبب في عدم قناعتهم باستخدام الاعشاب انهم اخذو عنها فكره من نصائح اشخاص اخرين لاستخدامها , و قد ذكر (14%) منهم انهم بدأو بتجربتها ولم يرو نتيجة مرضيه و عندما تم سؤالهم عن انواع الاعشاب التي يستخدمونها, ذكر (26%) منهم استخدام الجنزيبيل , (18%) يستخدمون القرفه, (12%) يستخدمون الشاي الاخضر.

اما بالنسبة للمستحضرات الصيدلانية لضبط الوزن, ذكر(80%) منهم انهم لا يستخدمون اي نوع منها, و (15%) كانوا يستخدمون بينما (5%) كانوا يستخدمونها احيانا.و قد أشار (59%) من المشاركين انهم لا يستخدمونها لان اضرارها اكثر من منافعها و ذكر (12%) منهم بانها غير متوفره بكثرة. من الانواع التي كانوا يستخدمونها (7%) قد استخدموا اقراص الخميره, (6%) يستخدمون جلكسي.

وجد أن (43%) من المشاركين ذكرو ان لديهم معرفه بكمية ونوعية الغذاء المخصص لهم, (40%) ذكرو ان ليس لديهم اي معرفه بكمية ونوعية الغذاء المخصص لهم.

و نخلص الى انه يوجد و عي لدى النساء اللاتي يرتدن مراكز ضبط الوزن من حيث استخدام الاعشاب ومدى قناعتهم باستخدامها, وعدم تفضيلهم لاستخدام المستحضرات الصيدلانية لضبط الوزن, ولديهم معرفة بكمية ونوعية الغذاء المخصصة لهم على حسب احتياجاتهم

Chapter one

1. Introduction

The prevalence of obesity is increasing worldwide resulting in an association with major health problems. On the other hands, many females and due to body image preferences tend to lose weight using regimens, medical and herbal agents for this purpose. Traditional medicine is the sum total of the knowledge, skills, and practices based on the theories, beliefs, and experiences indigenous to different cultures, whether accepted or not, used in the maintenance of health as well as in the prevention, diagnosis, improvement or treatment of physical and mental illness. Herbal medicines include herbs, herbal materials, herbal preparations and finished herbal products that contains active ingredient parts of plants, or other plant materials, or combinations (Hackman, *et al.* 2013).

It is well known that Complementary and alternative therapies have long been used in the Eastern world but recently these therapies are being used increasingly worldwide. When conventional medicine fails to treat chronic diseases and conditions such as obesity efficiently and without adverse effects, many people seek unconventional therapies including herbal medicine (Kuriyan, *et al.* 2007).

Although the number of randomized trials on complementary therapies has doubled every 5 years and the Cochrane library included 100 systematic reviews of unconventional interventions, least of these studies specifically mentioned herbal therapy in obesity. It was found that, good weight loss formulations included adaptogenic herbs, herbs with anti-anxiety properties, and herbs that support elimination (digestives, diuretics, and laxative). Adaptogens are herbs that have a “normalizing influence” on the body. These moderate the stress response and thus support immune function, normalize glucose metabolism, increase energy, and improve resistance (Hoffmann, 2014). Adaptogenic herbs in weight loss formulations include Siberian, American, and Chinese ginsengs; holy basil; schizandra; ashwaganda; licorice; and codonopsis (Roberts, *et al.* 2011).

Digestive herbs used in weight loss formulations that stimulate gastric and bile secretions and bowel motility or are antispasmodic include fennel, chamomile, lemon balm, peppermint, aniseed etc.... Laxative or cathartic herbs in weight loss formulations (aloe resin, senna etc....) should be approached cautiously. The best herbal weight loss formula should be individually constituted and compounded for each person (Nahin, *et al.* 2009). Many previous studies on herbal preparations used for weight loss, showed loss of body weight e.g. Slimax which was an extract of several plants including *Zingiber officinale* and also Bofutsushosan which showed a significant decrease in body weight (Roongpisuthipong, *et al.* 2013).

Objectives of the current study:

General objective:

To assess the general knowledge about using herbs and over-the-counter medicine for weight gain and weight loss among females attending private weight control centers in Khartoum State.

Specific objectives:

1. To identify the most used herbs and over-the-counter medicine commonly for weight gain and weight loss.
2. To evaluate the common practices towards weight gain and weight loss.
3. To determine their conviction about using herbs and over-the-counter medicine for weight gain and weight loss.

Chapter two

2. Literature review

2.1 Definition of obesity:

Obesity is a medical condition in which excess body fat has accumulated to the extent that it may have a negative effect on health. (WHO, 2014). People are generally

considered obese when their body mass index (BMI), a measurement obtained by dividing a person's weight by the square of the person's height, is 30 kg/m², with the range 25–30 kg/m² defined as overweight. (WHO, 2014). However, Some East Asian countries use lower values (Kanazawa, et al, 2005). Obesity is considered a medical condition in which excess body fat has accumulated to the extent that it may have an adverse effect on health (WHO,2000) and further it was evaluated in terms of fat distribution via the waist–hip ratio and total cardiovascular risk factors (Sweeting , 2007). Obesity increases the likelihood of various diseases, particularly heart disease, type 2 diabetes, obstructive sleep apnea, certain types of cancer, and osteoarthritis. (Haslam and James, 2005). Obesity is most commonly caused by a combination of excessive food intake, lack of physical activity, and genetic susceptibility (Yazdi *et al.*, 2015).

2.2 Classification of obesity:

Classification of obesity according to BMI (kg/m²) (WHO, 2014).

- Less than 18.5 underweight
- 18.5- 24.9 normal weight
- 25.0- 29.9 overweight
- 30.0- 34.9 class I obesity
- 35.0- 39.9 class II obesity
- Above 40.0 class III obesity

However, some modifications to the WHO definitions have been made by particular bodies. The surgical literature breaks down "class III" obesity into further categories whose exact values are still disputed. Accordingly, any BMI \geq 35 or 40 kg/m² is severe

obesity and BMI of ≥ 35 kg/m² and experiencing obesity-related health conditions where BMI ≥ 40 –44.9 kg/m² is morbid obesity.

2.3 Causes of obesity:

Combination of excessive food energy intake and a lack of physical activity are thought to explain most cases of obesity (Lau *et al*, 2007). A limited number of cases are due primarily to genetics, medical reasons, or psychiatric illness. In contrast, increasing rates of obesity at a social level are felt to be due to an easily accessible and palatable diet (Drewnowski and Specter, 2004).

On the other hand, increased reliance on cars and mechanized manufacturing are additional factors. (Nestle and Jacobson, 2000) (James, 2008).

Previous studies conducted have identified 10 other possible contributors to the recent increase of obesity in the following:

- Insufficient sleep.
- Endocrine disruptors (environmental pollutants that interfere with lipid metabolism).
- Decreased variability in ambient temperature.
- Decreased rates of smoking, because smoking suppresses appetite.
- Increased use of medications that can cause weight gain (e.g., atypical antipsychotics).
- Proportional increases in ethnic and age groups that tend to be heavier.
- Pregnancy at a later age (which may cause susceptibility to obesity in children).
- Epigenetic risk factors passed on generationally.
- Natural selection for higher BMI.

2.4 Management of obesity:

Management of obesity consists of dieting and physical exercise (Lau, *et al*, 2007) although diet programs may produce weight loss over the short term

(Strychar, 2006) but maintaining this weight loss is frequently difficult and often requires making exercise and a lower food energy diet must be permanent part of a person's lifestyle. (Wing, *et al*, 1998). In the short-term obesity management program, low carbohydrate diets appear better than low fat diets for weight loss. (Strychar, 2006) However, in the long term management programs; all types of low-carbohydrate and low-fat diets appear equally beneficial (Strychar, 2006). A previous study, found that the heart disease and diabetes risks associated with different diets appear to be similar (Naude, *et al*, 2014). Decreased intake of sweet drinks is also related to weight-loss. (Strychar, 2006) Success rates of long-term weight loss maintenance with lifestyle changes are low, ranging from 2–20 %. (Wing and Phelan, 2005). Thus, lifestyle changes are effective in limiting excessive weight gain in pregnancy and improve outcomes for both the mother and the child. (Wing, *et al*, 2012) It is stated that Intensive behavioral counseling is recommended in those who are both obese and have other risk factors for heart disease (LeFevre and Michael, 2014).

2.4.1 Therapeutic and Surgical management of obesity:

Three medications, Orlistat, lorcaserin and a combination of phentermine and Topiramate are currently available and recommended for long term use (Yanovski and Yanovski, 2014). Weight loss with Orlistat is modest, an average of 2.9 kg (6.4 lb) at 1 to 4 years. (Rucker, *et al*, 2007). It is stated that Orlistat use is associated with high rates of gastrointestinal side effects(Rucker , *et al*,2007) and concerns have been raised about its negative effects on the kidneys (Matthew ,2011). However, the other two medications are available in the United States but not Europe (Wolfe, 2013). Lorcaserin

results in an average of 3.1 kg weight loss (3% of body weight) greater than placebo over a year (Bays, 2011), however, it may increase heart valve problems. Although a combination of Phentermine and Topiramate is also somewhat effective (Bays, 2011) however, it may be associated with heart problems (Wolfe, 2013). The most effective treatment for obesity is bariatric surgery. (Johnston *et al.*, 2014). Surgery for severe obesity is associated with long-term weight loss, improvement in obesity related conditions (Chang, *et al.*, 2014) and decreased overall mortality. One study found a weight loss of between 14% and 25% by using bariatric surgery (depending on the type of procedure performed) at 10 years, and a 29% reduction when compared to standard weight loss measures (Sjöström, *et al.*, 2007). Complications occur in about 17% of cases and reoperation is needed in 7% of cases (chang, *et al.*, 2014). Due to its cost and risks, researchers are searching for other effective yet less invasive treatments including devices that occupy space in the stomach (Weintraub and Karen, 2014).

2.5 Relationship between herbs and weight loss:

Herbal medicines include herbs, herbal materials, herbal preparation and finished herbal products that contain active ingredients, parts of plants or other plant materials, or combinations (Hackman, *et al*, 2013).

It was found that, good weight loss formulations included adaptogenic herbs, herbs with anti-anxiety properties, and herbs that support elimination (digestive, diuretics, and laxative). Adaptogens are herbs that have normalizing influence on the body. These moderate the stress response and thus support immune function, normalize glucose metabolism, increase energy, and improve resistance (Hoffman, 2014).

Among them, certain selected herbs and spices can actually help you maintain a healthy body weight by promoting weight loss. So loss of few (or more) pounds may be achieved by being very generous when adding the following spices to food:

2.5.1 Cinnamon (*Cinnamomum verum*):

This spice may help to boost your metabolism, and it also has impressive benefits for blood sugar regulation, making it an ideal option for people with diabetes or pre-diabetes. Cinnamon has been found to significantly reduce blood sugar levels, triglycerides, LDL, and total cholesterol levels in people with type 2 diabetes, as well as increase glucose metabolism by about 20 times, which would significantly improve the ability to regulate blood sugar and lead to lose weight (Hlebowicz, *et al.*, 2007)

2.5.2 Ginger (*Zingiber officinal*):

Like cinnamon, ginger helps to control blood sugar, meaning it can help prevent a rise in your glucose levels after a sugar- or carb-rich meal. The spice also has the same fat-burning, or thermogenic, properties as turmeric and cayenne (Thomson, *et al.*, 2002).

2.5.3 Garlic (*Allium sativum*):

This herb can help your body burn fat, according to a study that found that mice on a diet with garlic lost more weight in 7 weeks than mice without it. While the results haven't been proven in humans, there's definitely no harm in adding more to your meals, it is cultivated in northern and central Sudan (Hassan, *et al.*, 2012).

2.5.4 Turmeric (curcuminoids):

Curcuma is the main active ingredient in turmeric it has powerful inflammatory effect and is a very strong antioxidant this brightly colored yellow spice may help your body burn fat. Turmeric increases body heat, which, in turn, can boost metabolism. It also has a lot of other health benefits, like helping fight Alzheimer's disease and controlling menstrual hormones (Kansandra, 2016).

2.5.5 Green tea:

It is loaded with antioxidants and various substances that are beneficial for health.

Many studies have shown that green tea can increase fat burning and help you lose weight. The active compounds in green tea can aid in this process by boosting the effects of some fat burning hormones (Cabrera, *et al.*, 2006).

2.5.6 Lupin bean (Lupinus):

It is yellow legume seeds and traditionally eaten as a pickled snack food, the low fat as well as carbohydrate contained in lupine beans help individuals to lose their extra body fat. Additionally, the fiber inhibits appetite by providing a satisfied feeling towards the stomach throughout the day. This removes the necessity for unhealthy snacks that usually play a role in putting on weight. (José, and Isabel, 1998).

2.5.7 Roselle (Hibiscus sabdariffa):

Traditionally, some tea drinkers use hibiscus tea to aid in weight loss. It is known that the body produces an enzyme known as amylase which functions to break down complex sugar and starch molecules in food. When a person consumes too much carbohydrate-rich food (full of sugar and starch) that individual is most likely going to gain weight. According to (Roc, 2011), hibiscus contains a substance that can inhibit the production of amylase. A person regularly drinking hibiscus tea can thus prevent too much absorption of carbohydrates and consequently not to gain excess weight.

2.6 Definition of underweight:

Under weight is a term describing a person whose body weight is considered too low to be healthy. The definition usually refers to people with a body mass index (BMI) of under 18.5 or a weight 15% to 20% below the normal for their age and height group (Mahan, *et al*, 2000). Anyone who is 15 to 20% below the normal weight for age and height is classified as underweight, according to (Mahan, *et al*, 2000). Underweight status represents depleted body fat and/or lean tissue stores. Underweight status has been associated with higher rates of morbidity and mortality, although to a lesser extent than obesity.

Canadian and US studies have demonstrated higher rates of hospitalizations and mortality in underweight adults, compared to those with weights within normal ranges. (Katzmarzyk, *et al*, 2001), (Sichieri, *et al*, 1992). Previous studies demonstrated that higher rates of asthma, intestinal problems and emotional disorders were found in underweight 17 year olds (Lusky, *et al*, 1996). Abnormal menses and subfertility has been demonstrated in underweight females (Lake, *et al*, 1997). Also underweight adolescents who become pregnant may be at increased risk for pregnancy complications and poor fetal outcomes, including prematurity and low birth weight. The onset of

puberty may also be delayed in male and female adolescents with a low BMI. The risk for osteoporosis may be increased in youth who remain lean as adults and underweight adolescents may have a negative body image, particularly males who may desire a muscular physique. Fatigue, lack of energy and increased susceptibility to infection may also be experienced in youth with a low BMI.

2.7 Causes of underweight:

Underweight status may be related to genetics, acute or chronic under nutrition, or illness. Some adolescents may be genetically lean with an efficient metabolism and low propensity to store body fat. Although the percentage of body fat may be low, lean tissue is usually within normal ranges and they are proportionately small.

Youth with chronic illnesses affecting the absorption, metabolism or loss of nutrients may lose a significant amount of weight resulting from the catabolism of fat and muscle tissue (DuPont, *et al*, 1998).

2.8 Management of underweight:

2.8.1 Diet:

Underweight individual may be advised to gain weight by increasing calorie intake. This can be done by eating calorie-dense foods, such as dried fruits, cheese, and nuts (Zeratsky,2011) Body weight may also be increased through the consumption of liquid nutritional supplements other nutritional supplements may be recommended for individuals with insufficient vitamin or mineral (Zeratsky, 2011).

2.8.2 Exercise:

Another way for underweight people to gain weight is by exercising. Muscle hypertrophy increases body mass. Weight lifting exercises are effective in helping to improve muscle tone as well as helping with weight gain. Weight lifting has also been shown to improve bone mineral density (Gleeson, *et al*, 2012) for which underweight people have an increased risk of deficiency (Coin,*et al*, 2012). Exercise itself is catabolic, which results in a brief reduction in mass. The gain in weight that can result of it comes from the anabolic overcompensation when the body recovers and overcompensates via muscle hypertrophy. This can happen by an increase in the muscle proteins, or through enhanced storage of glycogen in muscles. Exercise can help stimulate a person's appetite if they are not inclined to eat. (Coin, *et al*, 2012).

2.8.3 Appetite stimulants:

Certain drugs may increase appetite either as their primary effect or as a side effect. Antidepressants, such as mirtazapine or amitriptyline, and antipsychotics, particularly chlorpromazine and haloperidol as well as tetrahydrocannabinol (found in cannabis), all present an increase in appetite as a side effect. In particular states in U.S.A. where cannabis is approved, medicinal cannabis may be prescribed for severe appetite loss, such as that caused by cancer, AIDS, or severe levels of persistent anxiety. Other drugs which may increase appetite include certain benzodiazepines (such as diazepam), sedating antihistamines (such as diphenhydramine, promethazine or cyproheptadine (Douglas, *et al*, 2013) or B vitamin supplements.

2.9 Relationship between using herbs and weight gain:

For most underweight people, how to gain weight with herbs is more about regulating their metabolism and stimulating digestion. If they wanted to know how to put on weight with herbal supplements, they should consider following a meal plan designed to build lean muscle that gives their system the optimum nutrition needed to gain weight

gradually. This will involve herbs to stimulate digestion, and a diet that is high in lean protein, fiber from fruit, vegetables and carbohydrates from whole grains (Senin, 2016).

2.10 Some herbs used for weight gain:

2.10.1 Fenugreek (*Trigonella foenum-graecum*):

Fenugreek seeds have been found to contain protein, vitamin C, niacin, and potassium. Due to its estrogen-like properties, fenugreek seeds have been found to help increase libido and lessen the effect of hot flashes and mood fluctuations that are common symptoms of menopause and PMS. In India and China it has also been used to treat arthritis, asthma, bronchitis, improve digestion and helps to gain weight gradually, maintain a healthy metabolism, increase libido and male potency, cure skin problems (wounds, rashes and boils), treat sore throat, and cure acid reflux. Fenugreek also has a long history of use for the treatment of reproductive disorders, to induce labor, to treat hormonal disorders, to help with breast enlargement, and to reduce menstrual pain. Recent studies have shown that Fenugreek helps lower blood glucose and cholesterol levels, and may be an effective treatment for both type1 and 2diabetes. It is also being studied for its cardiovascular benefits (Zafar, 2014). Studies have found people who took 2 ounces (56g) of fenugreek seed each day had significantly (around 14 percent) lower cholesterol levels after 24 weeks, and had lowered their risk of heart attack by more than 25 percent. Therefore, a recommended remedy for lowering cholesterol is to take 2 ounces of seeds throughout the day. The seeds can be sprinkled onto prepared food, or they can be consumed with water if they are in capsule form (Zafar, 2014).

2.10.2 Millet:

Millet contains amino acids which increase appetite and helps in increase weight. It is digested at a faster rate thus keeps one away from taking excessive calories. Also, fibers present in millet give a feeling of fullness thus controls excessive food consumption. Finger Millet is rich in Calcium which helps in strengthening bones. It is an excellent source of natural calcium for growing children and aging people. Millets consumption helps in the development of bones in growing children and in maintenance of bone health in adults. It prevents diseases such as osteoporosis and could reduce risk of fracture. Millets also helps in controlling blood sugar levels. (Lanka, 2014) Finger Millet contains amino acids Lecithin and Methionine which help in bringing down cholesterol level by eliminating excess fat from Liver. Finger Millet also contains Threonine amino acid which hinders fat formation in the liver, which brings cholesterol level of the body down. Moreover, Millet is a very good source of natural Iron. Finger Millet consumption helps to control anemia (Lanka, 2014).

2.11 Using of medicines for weight gain:

Obesity researchers stated that weight gain is associated with a few categories or families of drugs, not necessarily some specific brands. And not everyone who takes these medicines puts on pounds. Happily, those who do usually have an alternative medication they can try (Joanne, 2011).

2.11.1 Types of drugs associated with weight gain for some patients include:

- Diabetes medicines, including insulin.
- Steroids such as prednisone and hormones used for arthritis and similar conditions.
- Some over-the-counter allergy medicines like Benadryl (also used as sleep aids for obese patients).

- Some heart and blood pressure medicines, such as both beta-blockers and alpha-blockers.
- Many drugs for depression and mental illnesses, like Elavil, Luvox, Eskalith and Zyprexa.
- Anticonvulsants for epilepsy or other neurologic conditions.

2.11.2. Antidepressants:

.Serotonin reuptake inhibitors such as Prozac, Zoloft, and Paxil are some of the biggest weight gain drugs; work by blocking a receptor in the brain that reabsorbs serotonin, which makes more of this "feel-good" chemical available to send messages between nerve cells. While that has a positive effect on mood, it also can affect appetite. "What we find is that these drugs can really increase cravings for carbohydrates (backby, 2016).

2.11.3 Birth control drugs:

Some contraceptives have been shown to cause weight gain, the dose of the hormone progesterone can increase appetite, and other forms of birth control can also cause weight gain, though this is often due to water retention (backby, 2016).

2.11.4 Beta blockers and angiotensin-receptor blockers:

.These blood pressure and migraine-prevention medications are known to cause a 5- to 7-pound weight gain, one recent study published in the journal Cell Reports found that angiotensin-receptor blockers make metabolism sluggish and may lead to obesity (backby, 2016).

2.1. Weight loss drugs:

For most people, the prescription for weight loss is pretty basic: Eat less, move more. In recent years, however, there are some drugs have been used for weight loss:

2.12.1 Orlistat:

It meant to treat obesity in conjunction with a low-fat, low-calorie diet, according to the FDA. This drug is a lipase inhibitor, meaning it works to prevent the action of a pancreatic enzyme called lipase, which breaks down fat in the small intestine. Thus, taking Orlistat with each meal prevents the absorption of all the fat from the food into the body.

It is found that orlistat is effective in reducing weight in obese patients, but caused more gastrointestinal distress than a placebo. However, the weight loss is likely to be modest. (Pappas, 2015)

2.12.2 Lorcaserin

This drug acts on serotonin receptors in the brain to promote feelings of fullness, thus encouraging users to eat less. Approved in 2012, lorcaserin was the first weight-loss drug to get an FDA nod since. According to the FDA, the drug (combined with diet and exercise) was associated with an average weight loss of 3 to 3.7 percent more than a placebo. In patients without Type 2 diabetes, 38 percent using the drug lost 5 percent or more of their body weight, which is the clinical standard for a successful obesity treatment. Among patients who used diet and exercise alone, 23 percent reached that level of weight loss. However, this drug combination can cause a birth defect called cleft palate in developing fetuses, so women of childbearing age taking it must use birth control and take a pregnancy test monthly. Another rare but serious side effect is the development of suicidal thoughts. According to the National Institutes of Health, about

1 in 500 people who take anti-seizure drugs like topiramate develop suicidal thoughts or behaviors (Pappas, 2015).

2.12.3 Liraglutide :

This drug was first approved in 2010 for the treatment of Type 2 diabetes. It helps promote insulin production in the pancreas, which in turn controls blood sugar. In December 2014, the use of Liraglutide for the treatment of obesity was expanded. (Pappas, 2015).

Chapter three

3. Methods

This current study was carried out in a number of 100 female participants who were attending private weight control centers selected randomly in Khartoum locality. The study assessed the women knowledge about using herbs and over-the-counter medicines for weight gain and weight loss. 100 subjects who were involved satisfied the selection criteria. Investigations were carried out through questionnaire, using specifically presented designed data collection questionnaire and was subsequently subjected to reliability testing survey questions using a coefficient to verify the amount of coherence and internal consistency of the scale tool. The alpha coefficient (99%) means the percentage that the sample homogenous and representative of the community.

After being assembled, the data were properly revised, classified, interpreted and statistically analyzed.

3.1. Study type:

The current study is descriptive cross sectional survey conducted to assess the knowledge of women about using herbs for purpose of weight gain and weight loss. It includes 8 types of herbal remedies and 4 types of pharmaceutical products their trade names were: Yeast tablets, Galaxy tablets, Vitamin A tablets and Vitamin B complex tablets.

3.2. Study area:

This study was conducted in randomly selected four private weight control centers in Khartoum State -Sudan.

3.3. Study population:

100 female attendees of four private weight control centers in Khartoum locality.

3.4. Study period:

This study was conducted from April-October 2016 for duration of approximately seven months.

3.5. Study variables:

The study variables were demographic data, Knowledge of using herbs for purpose of weight gain and weight loss, practice of women who participated in the study- attending the selected private weight control centers.

3.6. Data collection:

The data were collected using a questionnaire consisting of 28 questions (which included multiple choices).

3.7. Statistical analysis of data:

Data collected from the questionnaire were statistically analyzed by using SSPS version 16.0 by using chi-square (χ^2) test. Results were considered significant at $p \leq 0.05$.

Chapter four

4. Results

Table [1]: Distribution of women according to their Age:

Serial no	Age	Frequency	Percent
1	15-24	16	16.0
2	25-34	63	63.0
3	35-44	18	11.0
4	Above 45	3	18.0
5	Total	100	100.0

Table [2]: Distribution of women according to education level:

Serial no	Answer	Frequency	Percent
1	Khalwa	1	1.0
2	Secondary school	11	11.0
3	University level	73	73.0
4	Post graduate level	15	15.0
5	Total	100	100.0

Table [3] Distribution of women according to their jobs:

Serial no	Job	Frequency	Percent
1	Unemployed students, housewives	53	53.0
2	Employee	38	38.0
3	Self-employed	9	9.0
4	Total	100	100.0

Table [4]: Distribution of women according to income level per month:

Serial no	Income level per month	Frequency	Percent
1	(1000-3000) SDG	52	50.0
2	(3000-5000) SDG	36	36.0
3	Above 5000 SDG	12	12.0
4	Total	100	100.0

Table [5]: Distribution of women according to their weight:

Serial no	Weight description	frequency	percent	N	$\mu \pm \text{Std. E.}$ M.	df	Sig	Result
1	Underweight	20	20.0	100	2.45 \pm .095	99	.000	Overweight
2	Normal	27	27.0					
3	Overweight	41	41.0					
4	Obesity	12	12.0					
5	Total	100	100.0					

Table [6]: Program type of weight control they participate in:

Serial no	Type of program	frequency	percent	N	$\mu \pm \text{Std. E.}$ M.	df	Sig	Result
1	Weight gain	22.0	22.0	100	2.14 \pm .097	99	.000	Weigh t loss
2	Weight loss	55	55.0					
3	Fitness	16	16.0					
4	Weight gain and fitness	1	1.0					
5	Weight loss and fitness	6	6.0					
6	Total	100	100.0					

Table [7]: Reason for joining weight gain program:

Serial no	The reason	Frequency	percent	N	$\mu \pm \text{Std. E.}$ M.	df	Sig	Result
1	For appearance	26	26.0	100	2.42 \pm .060	99	.000	for better health
2	for better health	74	74.0					
3	Total	100	100.0					

Table [8]: Reason for joining weight loss program:

Serial no	If the answer to weight loss, why	frequency	percent	N	$\mu \pm \text{Std. E. M.}$	df	Sig	Result
1	For appearance	59	24.0	100	1.41 \pm 0.049	99	.000	For appearance
2	for better health	41	41.0					
3	Total	100	100.0					

Table [9]: Duration of exercise:

Serial no	The time	frequency	percent	N	$\mu \pm \text{Std. E. M.}$	df	Sig	Result
1	Less than 1week	43	43.0	100	1.9 \pm .093	98	.000	Before 1week
2	1-6month	36	36.0					
3	7month-1year	12	12.0					
4	Above 1 year	9	9.0					
5	Total	100	100.0					

Table [10]: Question about times they practice sport in the week:

Serial no	Answer	frequency	percent	N	$\mu \pm \text{Std. E.}$ M.	df	Sig	Result
1	1-2 times	11	11.0	100	2.4 \pm .089	99	.000	3 times
2	3 times	54	54.0					
3	Above 3 times	19	19.0					
4	Undefined	16	16.0					
5	Total	100	100.0					

Table [11]: Using herbs concurrently with exercise:

Serial no	Answer	frequency	percent	N	$\mu \pm \text{Std. E.}$ M.	df	Sig	Result
1	Yes	40	40.0	100	1.9 \pm .083	98	.000	Yes
2	No	33	33.0					
3	Some time	27	27.0					
4	Total	100	100.0					

Table [12-13]: Satisfaction about results of using herbs:

Serial no	- Do you find positive result when using herbs	Your conviction about using herbs			Total
		Yes	No	Sometimes	
1	Yes	29 (59.2%)	1 (2.0%)	19 (38.8%)	49 (100.0%)
2	No	5 (31.3%)	3 (18.8%)	8 (50.0%)	16 (100.0%)
3	Total	34 (52.3%)	4 (6.2%)	27 (41.5%)	65 (100.0%)

Table [14]: Types of herbs that have been used:

Serial no	Any of these types do you use:	frequency	Percent	N	$\mu \pm \text{Std. E.}$ M.	df	Sig.	Results
1	Ginger	33	33.0	100	4.08 \pm .454	98	.000	Ginger
2	Cinnamon	18	18.0					
3	Lupine	7	7.0					
4	Green tea	12	12.0					
5	Roselle	3	3.0					
6	Nirvana tea	2	2.0					
7	Fenugreek	7	7.0					
8	Millet	3	3.0					
9	Fenugreek +lupine	1	1.0					
10	Ginger + cinnamon + green tea	7	7.0					
11	Ginger + green tea	5	5.0					
12	Ginger + cinnamon	2	2.0					
13	Total	100	100.0					

Table [15]: Reason for un-satisfaction of using herbs:

Serial no	- If you are unconvinced for using herbs why	frequency	percent	N	$\mu \pm \text{Std. E. M.}$	df	Sig	Result
1	Began her experience and did not see satisfactory result	14	14.0	100	0.76 \pm .114	99	.000	Other
2	Expensive	4	4.0					
3	I took the idea from the experiences of other people	20	20.0					
4	Other	62	62.0					
5	Total	100	100.0					

Table [16]: Use of pharmaceutical products for weight gain or loss:

Serial no	Answer	frequency	percent	N	$\mu \pm \text{Std. E. M.}$	df	Sig	Result
1	Yes	15	15.0	100	1.90 \pm 0.44	99	.000	No
2	No	80	80.0					
3	Some times	5	5.0					
	Total	100	100.0					

Table [17]: The reason for non-use of the pharmaceutical products for weight control:

Serial no	The reason	frequency	percent	N	$\mu \pm \text{Std. E. M.}$	df	Sig	Result
1	more than benefits	59	59.0	100	1.15 \pm .087	99	.000	Deterring more than benefits
2	Expensive	10	10.0					
3	Not available	12	12.0					
4	Other	19	19.0					
5	Total	100	100.0					

Table [18]: Diet control during exercise:

Serial no	Answer	frequency	percent	N	$\mu \pm \text{Std. E. M.}$	df	Sig	Result
1	Yes	33	33.0	100	2.1 \pm .085	99	.000	Some time
2	No	28	28.0					
3	Some times	39	39.0					
4	Total	100	100.0					

Table [19] Number of meals per day:

Serial no	Answer	frequency	percent	N	$\mu \pm \text{Std. E. M.}$	df	Sig	Result
1	1-2 meals	46	46.0	100	1.69 \pm .076	99	.000	1-2 meals
2	3 meals	42	42.0					
3	5 meals	9	9.0					
4	7 meals	3	3.0					
5	Total	100	100.0					

Table [20]: knowledge about the quantity and quality of food:

Serial no	Answer	frequency	percent	N	$\mu \pm \text{Std. E. M.}$	df	Sig	Result
1	Yes	17	17.0	100	2.36 \pm .073	99	.000	Few know
2	No	40	40.0					
3	few knowledge	43	43.0					
4	Total	100	100.0					

Table [21]: Time of taking breakfast:

Serial no	Answer	frequency	percent	N	$\mu \pm \text{Std. E.}$ M.	df	Sig	Result
1	Before the exercise	71	71.0	100	1.5 \pm .078	99	.000	Before exercise
2	After exercise	11	11.0					
3	don't eat	18	18.0					
4	Total	100	100.0					

Table [22]: Fruits eating:

Serial no	Answer	frequency	percent	N	$\mu \pm \text{Std. E.}$ M.	df	Sig	Result
1	1-2 times	57	57.0	100	1.02 \pm .327	99	.000	1-2 times
2	4 times	19	19.0					
3	5above 4 times	18	18.0					
4	Don't eat	6	6.0					
5	Total	100	100.0					

Table [23]: green salad eating:

Serial no	Answer	frequency	percent	N	$\mu \pm \text{Std. E.}$ M.	df	Sig	Result
1	1-2 times	38	38.0	100	2.04 \pm .090	99	.000	Above 4 times
2	4 times	20	20.0					
3	above 4 times	42	42.0					
4	Don't eat							
5	Total	100	100.0					

Table [24]: Taking soft drinks:

Serial no	Answer	frequency	percent	N	$\mu \pm \text{Std. E.}$ M.	df	Sig	Result
1	Yes	40	40.0	100	2.35 \pm .088	99	.000	Some time
2	No	24	24.0					
3	Some times	36	36.0					
4	Total	100	100.0					

Table [25]: Fast food taking:

Serial no	Answer	frequency	percent	N	$\mu \pm \text{Std. E.}$ M.	df	Sig	Result
1	Yes	55	55.0	100	1.8 \pm .094	99	.000	Yes
2	No	9	9.0					
3	Some times	36	36.0					
4	Total	100	100.0					

Table [26]: taking snacks between meals:

Serial no	Answer	frequency	percent	N	$\mu \pm \text{Std. E.}$ M.	df	Sig	Result
1	Yes	55	55.0	100	1.45 \pm .050	99	.000	Yes
2	No	45	45.0					
3	Total	100	100.0					

Table [27]: Types of snacks taken:

Serial no	Answer	frequency	Percent	N	$\mu \pm \text{Std. E. M.}$	df	Sig.	Results
1	Fruit and vegetable	16	16.0	100	4.22 \pm .180	99	.000	other
2	Pastries and bakery	27	27.0					
3	Nuts	2	2.0					
4	All types	4	4.0					
5	Other	51	51.0					
6	Total	100	100.0					

The current study evaluated using of herbs and Over-the-counter medicines for weight gain and weight loss among females attending private weight control centers in Khartoum Locality.

4.1. Demographic studies:

Classification of the study subjects according to their age groups shown that majority (63%) were (21-29) years old, while the minority were (above 40), table [1]. Their education level showed that majority (73%) of them were university level and (15%) were above university, however, (11%) were secondary level, table [2]. Classification of women according to their jobs, showed that majority (53%) were unemployed (students, housewives), and (38%) of them were employee, table [3]. On the other hand, classification of women according to their income level showed that majority (52%) their income level was found to be (1000-3000 SDG/month), and (36%) their income was found (3000-5000 SDG/month), table [4].

4.2. Distribution of women according to their weight:

Classification of participants according to their weight revealed that (41%) of them were overweight, (27%) were normal weight, and (20%) were underweight, table [5].

4.3. Program type of weight control they participate in:

Participants when asked about the program of weight control they joined, revealed that the majority (55%) of them joined for weight loss and (32%) of them were using herbs for this purpose while (17%) don't use herbs. However, (22%) of all participants has joined for weight gain programs to gain weight,

(6%) out of these were using herbs, (9%) don't use, and (7%) of them has used herbs for some time, table [6].

4.4. Reason for joining weight gain program:

When participants were asked about the reason to join the weight control centers, the response of weight gain was (74%, while (26 %) of them claimed that they joined for better health and (26%) just for preferable appearance, table [7].

4.5. Reason for joining weight loss program:

Questions about the reason for joining weight loss programs revealed that majority (59%) of participants have joined the program for good body shape and appearance while (41%) of them have joined for better health, table [8].

4.6. Duration and frequency of exercise:

When participants were asked about duration of exercise adopted, it was found that majority (43%) of them exercised for 1 week period while (36%) of them exercised for (1-6 month) and 9 % of them have exercised for more than one year time (54%) practice sports 3 times a week and (19%) practice sports above 3 times per week, tables [9] and [10].

4.7. Using herbs concurrently with exercise:

(40%) of participants have used herbs in addition to exercise, (33%) said they did not and (27%) said some times, table [11].

4.8. Satisfaction about results of using herbs:

When participants were asked about satisfaction about result of using herbs (59.2%) of them were satisfied about using herbs and find positive results upon using, (31.3%) said they were satisfied about using herbs but didn't find positive

results from using , and (18.8) were not satisfied about using herbs and didn't find positive result from using it. Tables [12. and13]

4.9. Types of herbs that have been used:

Use of various types of herbs was investigated among participants. These herbs were as follows: Ginger, Cinnamon, Lupine, Green tea, Roselle, Nirvana tea, Fenugreek, Millet, Fenugreek +lupine, Ginger + cinnamon + green tea, Ginger + green tea and Ginger + cinnamon. It was found that ginger (33 %) and cinnamon (18 %) were the most widely used herbs for weight loss. While fenugreek (7%) and millet (3%) were the most widely used herbs for weight gain table [14].

4.10. Reason for un-satisfaction of using herbs:

14 % of participants said that they tried using herbs for the reason of weight control; however, they did not find satisfactory results. 20 % were not satisfied for the idea of using herbs because of experiences of other people. On the other hand, 26 % did not mention the exact reason of their un-satisfaction, table [15].

4.11. Use of pharmaceutical products for weight gain or loss:

80 % of participants did not use pharmaceutical products for weight control while 15 % of them have used these products. On the other hand, (59 %) of participants said they do not use pharmaceutical products for weight control because they think these products are worse than useful, while (12 %) said these products are not available, tables [16] and [17].

4.12. Diet control during exercise for weight gain and loss:

(39%) of participants said sometimes they control their diets while exercising, (33%) control their diets while (28%) have no diet control, table [18].

4.13. Food habits of participants for weight gain and loss:

(46%) of participants said they eat (1-2 meals) per day, and (42%) said they eat 3meals per day, table [19]. However, (43%) said they have little knowledge about quantity and quality of food, and (40%) said they don't have any knowledge, (17%) said they have knowledge, table [20]. It was found that majority of participants (71%) take their breakfast before the exercise, and (18%) said they don't eat breakfast, table [21].

While (57%) of participants eat fruits (1-2 times) per week, (19%) eat fruits 4 times per week. Also it was found that, (42%) of participants eat vegetables above 4 times per month, while (38%) eat vegetable (1-2 times) a month. It was found that (40%) of participants takes soft drinks while (36%) do not take soft drinks, tables [22], [23] and [24].

(55%) of participants eat fast foods, while (36%) said some times, Also (55 %) take snacks between meals and (45 %) do not take snacks between meals, and (27%) take pastries and bakery as snacks, tables [25], [26] and [27].

Chapter five

5. Discussion

This study evaluated the knowledge and awareness of using herbs and over-the-counter medicine for weight gain and weight loss among women in private weight control centers in Khartoum locality.

In the current study, the majority of women under study were overweight and they participated to these programs in order to lose weight and the major purpose for their participation is to seek good looking (appearance). (32%) of them were using herbs for weight loss while (17%) don't use herbs. On the other hand, (22%) out of all participants joined these centers for weight gain, (6%) of them were using herbs, (9%) did not use, and (7%) of them used herbs for some time.

It is well known that most of the herbal therapies are natural foods recommended for healthy nutrition. In the current study, it was found that most participants have used a number of herbs like (ginger, cinnamon, green tea, fenugreek, and millet), to lose weight especially ginger (33%) and cinnamon (18%) in addition to exercise. While fenugreek (7%), millet (3%) were the most widely used herbs for weight gain and a wide range of them are convinced for using herbs for this purpose but some of them were unconvinced for using herbs either because they took the idea from others experiences or because they had their own experience and didn't see satisfactory results. However, previous studies revealed that herbs used with exercise have an ergogenic effect and help to improve physical performance (Chen *et al.*, 2012).

Ginger, Cinnamon, and green tea are used herbs known to have therapeutic effects specially on monitoring glucose and lipid profiles and glycemic control of diabetic patients (Thomson *et al.*, 2002) and (Mang, *et al.*, 2006). On the other hand, a previous study conducted by (Westerterp, *et al.*, 2005) showed that high caffeine intake was associated with weight loss through thermogenesis and fat oxidation in women. In

habitual low caffeine consumers, the green tea-caffeine mixture improved weight management, partly through thermogenesis and fat oxidation.

In this study, some participants were found to use un-prescribed pharmaceutical products to gain weight like: Galaxy (vardman), Yeast product (dietary product), vitamin B complex cyproheptadine and vitamin A. However, the majority of them and (80%) don't use any pharmaceutical product because they think these products are more deteriorating than efficient and some of them said these products are not available. (Roles, *et al.*, 2009) showed that some drugs may cause weight loss by making food intake difficult; they may suppress the appetite, alter taste sensations, induce nausea or vomiting, cause mouth dryness, or lead to inflammation in the mouth or gastrointestinal tract. Also Medication that cause drowsiness, such as sedatives and some painkillers, can make a person too tired to eat causing weight loss.

It is found that most participant have controlled diet during exercise and this agrees with (Mackey, *et al.*, 2000) who stated that dietary intake of fat and cholesterol are decreased during the one-year study as ($p < 0.001$) as did body weight, in women and men. Another previous study (John, *et al.*, 1991) showed that enhancing participation in long-term exercise may translate into improved long-term weight loss and weight gain in over weight and underweight adults.

Forty three of participants had the knowledge about quantity and quality of food and it is obvious that getting better knowledge is very important to get the best results from exercise and so they can get ideal body weight.

Asking participants about their eating behavior revealed that (42%) of them said they eat (1-2) meals, and (71%) eating breakfast before the exercise, (57%) eating fruit (1-2) times per week, (42%) eating vegetable 4 times per week, (40%) of them drinking soft drink, (55%) eating fast food and (55%) taking snacks between meals like pastries and

bakery and juice. All of the mentioned regimes are good ways to help them for weight control in the recorded time. James, *et al.* (1987) stated that Measurement of general social support scale or to report health habits are specific to dietary and exercise habit change. While Tucker, and Reicks (2002) showed that the relationship between eating behavior and exercise may influence the effectiveness of intervention for adults and subjects in later stages for exercise behavior were also likely to be in later stage for eating adequate servings of fruits and dairy products and vegetable and avoiding fat and hence exercise is a potential gateway behavior for some dietary behaviors for adults.

Chapter sex

6. Conclusion and Recommendations

Conclusion:

The current study is conducted to assess the general knowledge about using herbs and over-the-counter medicine for weight gain and weight loss among females attending weight control centers in Khartoum locality. The study included 8 types of herbs (ginger, cinnamon, lupine, green tea, Roselle, nirvana tea, fenugreek, and millet) and 4 types of pharmaceutical products Galaxy (vardman), Yeast product (dietary product), vitamin B complex, cyproheptadine and vitamin A (vardativ.A).

It is concluded that many women participating in the study were using herbs for weight control in addition to exercise and have sufficient awareness about the risk of using un-prescribed pharmaceutical products on health and this may be attributable to the level of education, where (73%) of them were at university level and (15%) are above university level which encouraged good understanding of the importance of using herbs and regulating food intake in addition to exercise for purpose of weight control issues.

Recommendations:

- Promote the use of well established and scientifically proven natural herbs used for weight control in public and in weight control centers.
- It is recommended to increase the awareness through media and scientific papers about importance and necessity of the use of natural herbs for weight control.

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Appendix

Appendix 1 figures

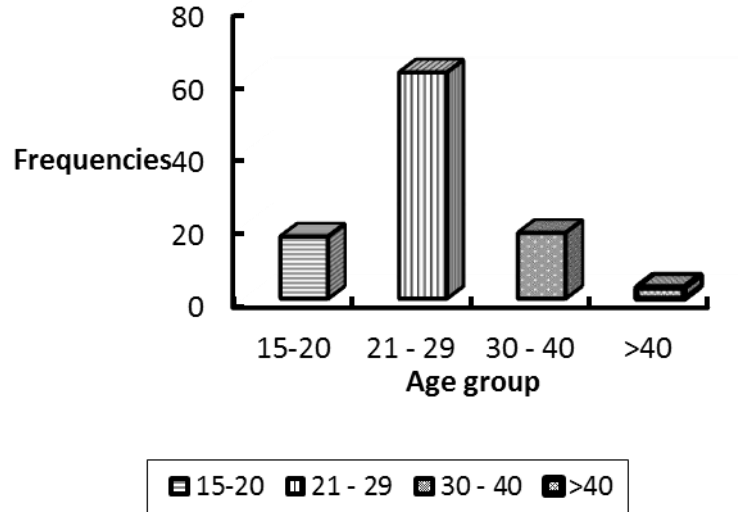


Fig .No. (1): Graphical analysis show: the distribution of sample under study according to Age groups

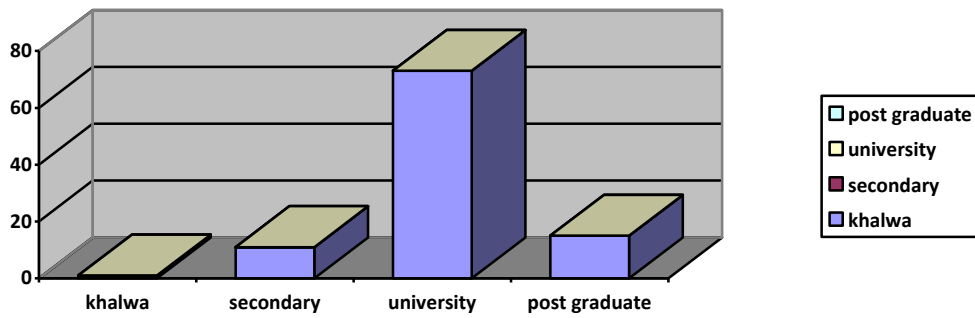


Fig No. (2): Graphics analysis show: the distribution of Educational level of the sample under study

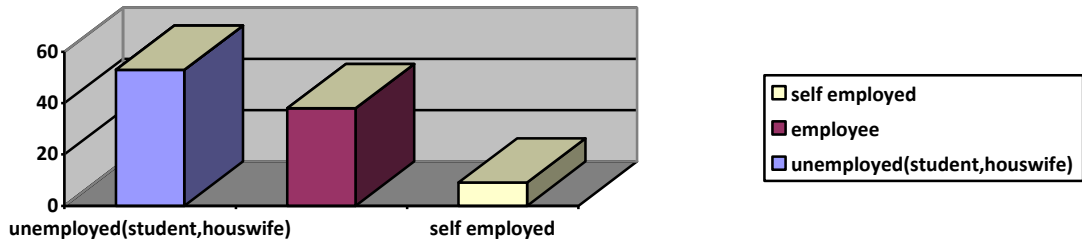


Fig No. (3): Graphics analysis show: the distribution of sample under study according to Job

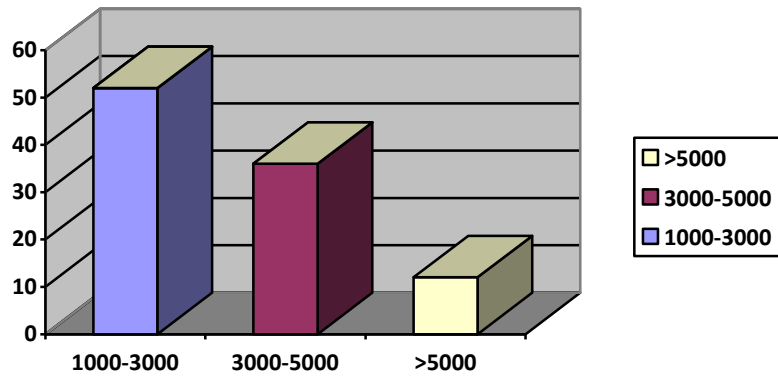


Fig No. (4): Graphics analysis show:the distribution of sample under study according Income

Appendix 11 Questionnaires

National Ribat University

Faculty of medicine

Department of Biochemistry

M.SC. Human Nutrition and Dietetics program

Dear participant thank you for accepting to help in this questionnaire which estimates the Assessment of General Knowledge about Using Herbs for Weight Gain and Weight Loos.

Information submitted here will be cept confidential and for research purposes only:

A. Personal information:

1) Age:

15-24 () 25-34 () 35-44 () above 45 ()

2)Education level:

Illiterate () Kahlua () Primary () secondary () university () above university ()

3) Job:

Unemployed (students, housewives) () Employee () Self-employed ()

4) Income level per month:

1000-3000 () 3000-5000 () above 5000 ()

B. Information about their weight and reason for participate in the center:

5) When measuring the weight result was:

Underweight () normal () overweight () Obese ()

6) The program of weight control you participate in the center:

Weight gain () Weight loss () Fitness ()

7) If the answer to weight gains, why:

For appearance () for better health ()

8) If the answer to weight loss, why:

For appearance () for better health ()

9) When did you start the program?

Before one week () one month-6 month () 7 month-one year () above one year ()

10) How many times you practice sport in the week:

1-2 times () 3 times () above of 3 times () undefined ()

C. Information about using herbs and pharmaceutical products in addition to exercise and their knowledge about quantity and quality of food:

11) Did you use herbs in addition to exercise?

Yes () No () sometimes ()

12) Your conviction about using herbs:

Convinced () unconvinced () to some extent ()

13) Do you find positive result when using herbs?

Yes () No () Sometimes ()

14) Any of these types do you use:

Ginger () Cinnamon () Lupin () Green tea () Roselle () nirvana tea () Fenugreek () Millet () other ()

15) If you are unconvinced for using herbs why:

Began her experience and did not see satisfactory result () Expensive () I took the idea from the experiences of other people ()

16) Did you use pharmaceutical products for weight gain or loss?

Yes () No () Sometimes ()

17) If you use, which type of these?

Galaxy () Yeast tablets () vitamin A () Vitamin B complex () other ()

18) If you don't use, why:

Deterring more than benefits () expensive () Not available ()

19) Do you have a diet during exercise?

Yes () No () Sometimes ()

20) number of meal per day:

1-2 meals () 3 meals () 5 meals () 7 meals ()

21) Do you have knowledge about the quantity and quality of food assigned to you you're your weight and height`

Yes () No () few know ()

22) Usually when you eat breakfast:

Before the exercise () after breakfast () don't eat ()

23) the number of times a week eating vegetables:

1-2 times () 4 times () above of 4 times () don't eat ()

24) The number of times a week eating fruit:

1-2 times () 4 times () above of 4 times () don't eat ()

25) Do you take soft drink?

Yes () No () Sometimes ()

26) Do you take fast food:

Yes () No () Sometimes ()

27) Do you take snacks between meals:

Yes () No () Sometimes ()

28) if you take it which one of these:

Fruit and vegetable () Pastries and bakery () Nuts ()

جامعة الرياض الوطني
كلية الطب
ماجستير التغذية العلاجية والبشرية

عزيزتي المشاركة: شكرا لك على موافقتك للمساعدة في ملأ هذا الاستبيان الخاص لتقييم المعرفة العامه حول استخدام الاعشاب والمستحضرات الصيدلانية لزيادة ونقصان الوزن, ونحيطك علما بان كل المعلومات التي بالاستبيان سريه وتستخدم لاغراض البحث فقط.

القسم الاول: المعلومات الشخصية:

1- العمر

15- 24 () 25- 34 () 35- 44 () اكثر من 45 ()

2- المستوى التعليمي:

أمي () خلوه () ابتدائي () ثانوي () جامعي () فوق الجامعي ()

3- الوظيفة:

غير موظفه (طالبه - ربة منزل) () موظفه () موظفه على حسابك الخاص ()

4- مستوى الدخل الشهري:

1000-3000 جنيه () 3000 - 5000 جنيه () اكثر من 5000 جنيه ()

القسم الثاني: معلومات عن الوزن وسبب الاشتراك في المركز:

5- عند قياسك للوزن كانت النتيجة: -

ضعيف () عادي () سمين () بدانه (سمنه مفرطه) ()

6- برنامج الوزن الذي تشاركين فيه في المركز:

زيادة الوزن () نقصان الوزن () لياقه بدنيه ()

7- اذا كانت الاجابه لزيادة الوزن : مالمسب:

للمظهر العام () لصحه افضل ()

8- اذا كانت الاجابه لنقصان الوزن مالمسب: -

للمظهر العام () لصحه افضل () -

9- متى بدأت البرنامج:

قبل اسبوع () شهر - 6 اشهر () 7 اشهر - سنه () اكثر من سنه ()

10- كم مره تمارسين الرياضه في الاسبوع:

مرتين () 3 مرات () اكثر من 3 مرات () غير محدد ()

القسم الثالث: معلومات عن استخدام الاعشاب والمستحضرات الصيدلانيه بالاضافه لممارسه الرياضه ومعرفتهم بكمية

ونوعيه الغذاء المخصصه لهم:

11- هل تستخدمين اعشاب بالاضافه الى ممارسه الرياضه:

نعم () لا () احيانا ()

12- هل انت مقتنعه باستخدامها باستخدامها:

مقتنعه () نوعا ما () غير مقتنعه ()

13- هل ترين نتيجة ايجابية عند استخدامها:

نعم () لا () احيانا ()

14- اي من هذه الانواع تستخدمين:

جنزيبيل () قرفه () ترمس () شاي اخضر () كركدي () شاي نيرفانا () حلبة () دخن () اخرى ()

15- اذا كنت غير مقتنعه باستخدام الاعشاب؛ ماهو السبب:

بدات بتجربتها ولم ارى نتيجة مرضيه () باهظة الثمن () اخذت عنها فكره من تجارب اشخاص اخرين ()

16- هل تستخدمين ادويه او مستحضرات صيدلانية للتخسيس او زيادة الوزن

نعم () لا ()

17- اذا كنت تستخدمين اي من هذه الانواع تستخدمينها :

جلكسي () اقراص الخميره () فيتامين أ () فيتامين ب المركب () اخرى ()

18- اذا كنت لاتستخدمين مالمسبب :

اضرارها اكثرمن منافعها () باهظة الثمن () غير متوفره بكثره ()

19-هل تتبعين نظام غذائي معين اثناء البرنامج الرياضي:

نعم () لا () احيانا ()

20- كم عدد الوجبات في اليوم:

وجبتين () 3 وجبات () 5 وجبات () 7 وجبات ()

21- هل لديك معرفة عن كمية ونوعية الغذاء المخصصة لك على حسب وزنك:

نعم () لا () معرفة قليلة ()

22- عادة متى تتناولين وجبة الافطار

قبل ممارسة الرياضة () بعد ممارسة الرياضة () لا تناولها ()

23- عدد مرات تناول الفواكه في الاسبوع

مرتين () 4 مرات () اكثر من ذلك () لا تناولها ()

24- عدد مرات تناول الخضروات في الاسبوع

مرتين () 5 مرات () اكثر من ذلك () لا تناولها ()

25- هل تتناولين المشروبات الغازية :

نعم () لا () احيانا ()

26- هل تتناولين وجبات المطاعم السريعة

نعم () لا () احيانا ()

27- هل تتناولين وجبات خفيفه بين الوجبات الرئيسيه:

نعم () لا () احيانا ()

28- اذا كنت تتناولينها ماهي نوعيتها:

فواكه وخضروات () معجنات ومخبوزات () مكسرات ()