International Journal of Farmacia

Journal Home page: www.ijfjournal.com

Nutrease powder - nature's blend of nutrients to maintain optimum health and prevent diseases in adults

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ABSTRACT

An adult individual needs to balance energy intake with his or her level of physical activity to avoid storing excess body fat. Dietary practices and food choices are related to wellness and affect health, fitness, weight management, and the prevention of chronic diseases such as osteoporosis, cardiovascular diseases, cancer , and diabetes . The science of nutrition is dedicated to learning about foods that the human body requires at different stages of life in order to meet the nutritional needs for proper growth, as well as to maintain health and prevent disease. A baby is born with a very high requirement for **energy** and **nutrient** intake per unit of body weight to provide for rapid growth. The rate of growth is the highest during the first year and declines slowly after the age of two, with a corresponding decrease in nutrient and energy requirements. During puberty**,** however, **nutritional requirements** increase sharply until this period of fast growth is completed. Adulthood begins at about the age of fourteen or fifteen for girls, and eighteen or nineteen for boys.

This review summaries the current available scientific literature regarding the effect of NUTREASE POWDER, The Nature's blend of protein, Fibers, plant extracts (phytochemicals) as balanced Nutrition for Adults.

Keywords; Adult Nutrition, Balance diet, Nutritional status, NUTREASE POWDER

INTRODUCTION

Good nutrition can help prevent disease and promote health.

Vitamins and **minerals** are an important part of nutrition. Vitamins are organic substances present in food. They are required by the body in small amounts to regulate **metabolism** and to maintain normal growth and functioning. Minerals are vital because they are the building blocks that make up the muscles, tissues, and bones. They also are important to many life-supporting systems, such as hormones, transport of oxygen, and enzyme systems.

There are many nutrients the body absorbs from food and each of the food groups supplies at least one nutrient. For example, oat bran, which is a whole grain, can supply **fiber** and a mineral called **magnesium.** A good nutrition plan will ensure that a balance of food groups, and the nutrients supplied by each group, is eaten

Purpose of good Nutrition for Adults

As children, nutrition is important for normal growth and development. As adults, nutrition still promotes health and reduces risk of disease. Good nutrition can help prevent weight gain by focusing on consuming calories that are high in nutrients, not in sugars and fat. Nutrition also plays a role in preventing and controlling diseases. For example, poor nutrition can lead to high cholesterol, which causes **coronary heart disease.** Lowering salt in the diet can control high blood pressure. People with

diabetes must follow special diets to control their blood glucose levels.

Examples of people with medical conditions and diseases show the effect that certain nutrients, or a lack of certain nutrients, can have on the human body. Some specific diseases linked to poor diet and physical inactivity are cardiovascular disease, type 2 diabetes, high blood pressure, **osteoporosis**, and certain types of **cancer.** Being overweight, and especially obese, also is linked to many health problems. Eating a poorly balanced diet that is low in nutrients but high in total calories can lead to weight gain.

Special diets or nutritional therapy may be used to complement other treatments subscribed to treat particular diseases and conditions. Examples include:

- High cholesterol. Eating a diet high in fiber and low in saturated fats and cholesterol can help keep cholesterol in check.
- High blood pressure. Reducing salt and certain fats, as well as reducing overall weight, helps lower blood pressure. Special diets like Nutrease powder have been developed to lower risk of high blood pressure and heart disease.
- **Monounsaturated fat—**Fats that contain one double or triple bond per molecule. Though these fats still have lots of calories, they can help lower blood cholesterol if used in place of saturated fats. Examples of monounsaturated fats are canola oil and olive oil.
- **Polyunsaturated fat—**Fats that contain two or more double or triple bonds per molecule. Examples include fish, safflower, sunflower, corn, and soybean oils.
- Diabetes. Nutrition is critical to adults with type 2 diabetes. They will have to control portions, eat regularly and eat nutrient-rich foods, along with other dietary guidelines.
- Anemia. People with anemia need to get more iron from their diets and will be encouraged to eat more foods such as soybeans, spinach, and others.

Nutrition is important throughout adults lives. As younger adults, good nutrition helps keep people strong as they need energy for active lives that may involve athletic pursuits and busy days filled with work and raising children. Pregnant women will need to pay particular attention to nutrition. In the middle years, proper nutrition helps prevent disease and weight gain that normally is associated with aging and lives that may become more sedentary. And as people reach their mature years, nutrition becomes critical, as many people in their later years fail to eat properly due to medical conditions and medications or social factors.

Basic food groups

The following are the basic food groups includes

- Grains. The guidelines recommend eating at least three ounces of whole grain bread, cereal, crackers, rice, or pasta every day. At least one-half of all grains should be whole grains, which can be determined by looking for the word "whole" before the grain name on the list of ingredients.
- Vegetables. The guidelines recommends eating more dark green and orange vegetables, as well as more dry beans and peas.
- Fruits. A variety of fresh, frozen, or canned fruit is good, but the guidelines recommends taking it easy on fruit juices.
- Milk, yogurt, and cheeses. The guidelines recommends getting plenty of calcium-rich food from low-fat or fat-free milk. People who can't drink milk should turn to lactose-free products or other sources of calcium, such as hard cheeses and yogurt.
- Meat and beans. Lean protein should come from low-fat or lean meats and poultry that is prepared by grilling, baking, or broiling. Varying choices is recommended, so that more fish, beans, peas, nuts, and seeds that provide protein are part of the diet.
- Oils and fats. Most fat sources should come from fish, nuts, and vegetable oils. Solid fats such as butter, stick margarine, shortening, and lard should be limited.

Food groups to encourage

The new guidelines encourage eating enough fruits and vegetables to stay within energy needs. Two cups of fruit and about 2 and one-half cups of vegetables per day are adequate for a person consuming 2,000 calories per day. Those eating more or less than 2,000 calories can adjust their fruits and vegetables up or down.

Adopting a balanced eating pattern

The **Dietary Guidelines** recommend adopting a balanced eating pattern. Using the pyramid can help customize a plan or adults can choose the DASH eating plan. DASH is a plan that was created to help prevent high blood pressure by minimizing salt in the diet, by providing a balance of nutrients, and by keeping weight down.

Recommendations for specific adult populations

Not every adult has the same nutritional needs. In addition to specific nutritional needs related to diseases or activity, the following recommendations apply to certain groups:

- People over age 50. Guidelines recommend consuming vitamin B_{12} in fortified foods or supplements. -Women of childbearing age. If a woman many become pregnant, she should eat iron-rich plant foods or those that help absorb iron, such as vitamin-C rich foods. Women in their first trimester of pregnancy should consume adequate synthetic folic acid daily from fortified foods or supplements in addition to food forms from a varied diet.
- Older adults, people with dark skin, and people not exposed to sufficient sunlight. These individuals should consume extra vitamin D from vitamin-D fortified foods and/or from supplements.

Getting adequate nutrients

The actual amount of any nutrient a person needs, as well as the amount each individual gets from his or her diet will vary. Many adults do not receive enough **calcium** from their diets, which can lead to osteoporosis later in life. Other nutrients of concern are potassium, fiber, magnesium, and **vitamin E.** Some population groups also need to get more **vitamin B_{12}, iron**, folic acid, and **vitamin D.** These nutrients should come from food when possible, then from supplements if necessary.

Fluid

Many adults ignore the role that fluids play in nutrition. It is important to moderate drinking of high-sugar beverages and fruit juices, as well as alcoholic beverages. Most people will get adequate hydration from normal thirst and drinking behavior, especially by consuming fluids with meals.

Nutrition for strength

Adults who are physically active and who strength train or pursue athletic activities will have different nutrition needs than typical adults of the same age. For example, they will require more fluids while

exercising. In general, athletes and those who are very active also require more **carbohydrates** in their diets than typical Americans. Carbohydrates provide energy, but they should come from whole grains and fruits, not from refined sugars.

Vegetarian diets

Vegetarians can achieve recommended nutrient intakes by carefully choosing foods from the basic food groups. They will need to pay special attention to intake of **protein**, iron, and other vitamins, depending on the type of vegetarian program they follow. Choosing nuts, seeds, and legumes from the meat and beans group, as well as eggs if they desire, can provide enough nutrients at the proper serving level.

Processed and prepared foods

Highly processed foods do not contain significant amounts of essential minerals. They often contain high amounts of fats and sugar, as well as **artificial preservatives** and other additives.

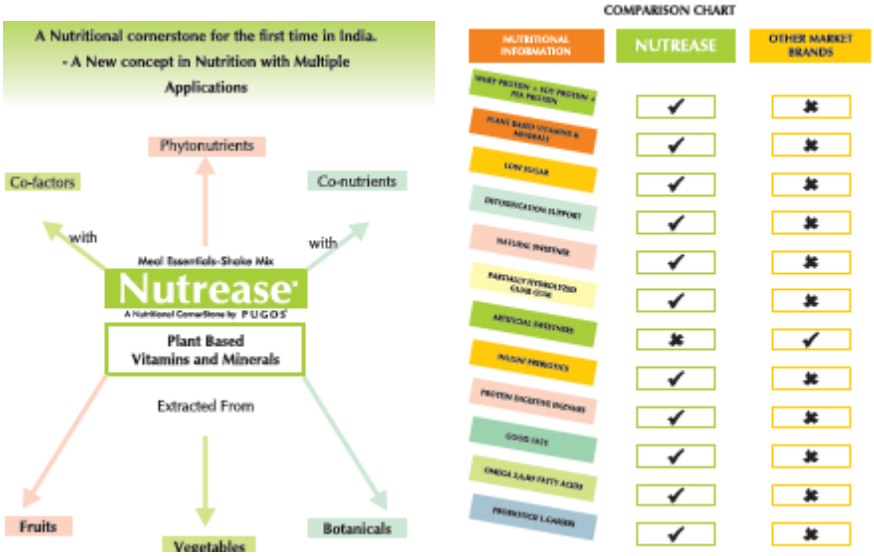
Calories and weight management

By managing portions, eating a balanced diet from the food groups and not using discretionary calories on high-sugar or high-fat foods, people can maintain a reasonable intake of calories. Regular physical activity can help use calories to provide better balance. Research has shown that subtracting just 100 calories a day from the diet can help manage weight, and eating 500 fewer calories a day can result in losing one pound per week in weight. But every individual is different and it is recommended to involve a physician or dietician in a weight loss plan.

Nutrease powder

A nutritional cornerstone for first time in india -A new concept in india with Multiple Applications.

Pharmacological action of each ingredients of nutrease powder



Composition of nutrease powder

Serving Size : 30g (1 Scoop)		Serving per container : 20
Supplement Facts	**Per 100g Approx**	**Per 30g Approx**
Energy	349.86 Kcal	104.96 Kcal
Protein	38.723g	11.61g
Total Carbohydrate	53.05g	15.91g
Dietary Fiber	22.17g	6.648g
Sugar	6.093g	1.82g
Total Fat	3.00g	0.902g
Saturated Fats	2.62g	0.78g
Mono Unsaturated Fats	0.133g	0.040g
Poly Unsaturated Fats	0.116g	0.034g
VITAMINS		
Vitamin A	2000IU	600IU
Vitamin C	40mg	12mg
Vitamin E	10mg	3mg
Thiamine	0.075mg	0.03mg
Riboflavin	0.05mg	0.015mg
Niacin	0.21mg	0.063mg
Pantothenic Acid	0.24mg	0.072mg
Pyridoxine	0.1mg	0.03mg
Folic Acid	0.002mg	0.0006mg
MINERALS		
Calcium	100mg	30mg
Iron	5mg	1.5mg
Phosphorus	200mg	60mg
Selenium	100mcg	30mcg
Copper	5mg	1.5mg
Chromium	100mcg	30mcg
Potassium	50mg	15mg
Sodium	50mg	15mg
Choline	15mg	4.5mg
Manganese	2mg	0.6mg
Zinc	5mg	1.5mg
Magnesium	100mg	30mg

INGREDIENTS :

Inulin, Soya Protein Isolate, Pea Protein Isolate, Whey Powder, Cyclodextrin, Partially Hydrolyzed Guargum, Guava Leaf Extract, Moringa Extract, Sesbania Extract, Annatto Extract, Green Tea Extract, Holy Basil Extract, Amla Extract, Lemon Peel Extract, Citrus Bioflavonoids, Flax Seed Powder, Brassica, Lactobacillus Gasseri, Papaya Fruit Latex, Pine Apple Extract, Steviol Glycosides (Rebaudioside A), Ginger Powder, Curcuminoids, Banana Leaf Extract, β-Carotene, Di Calcium Phosphate, Choline, Copper Sulphate, Manganese Sulphate, Fructose, Riboflavin, Skimmed Milk Powder, Xanthum gum, Apple Fiber, Sodium Carboxymethyl Cellulose, Mango Powder and Mango Flavor.

Mechanism of action of nutrease powder

Nutrease contains standardized plant-based vitamins and minerals which include a diverse mixture of substances including dozens of closely related vitamers and phytonutrients to help potentiate insulin action and thus influence carbohydrate, lipid and protein metabolism. Targeted botanicals and antioxidants like curcuminoids, sulforaphaneglucosinolate from Broccoli Extract and Ginger Extract to help regulate metabolism, stimulate digestion and to provide long-lasting cell protection from free radical damage. Probiotics and prebiotics like Lactobacillus gasseri and Inulin to help balance intestinal flora, reduce waist circumference and reduce adipocyte size through inhibition of leptinlevels. Good fats like omega 3,6& 9 from

Flaxseed and Medium Chain Triglycerides (MCT), help to maintains healthy levels of blood sugar and triglycerides, enhance metabolism to burn more calories. Optimum fibers like alpha cyclodextrins, partially hydrolyzed guar gum, and oat fiber to help promote intestinal regularity, to increase the satiety and improve glycemic effect of meal. Plant enzymes like bromelain and papain for better digestion and absorption of proteins. Premium blend of Natural protein concentrate and pea protein isolate to meet the daily protein requirements and to maintain optimum health & Strength in Adults.

NUTREASE Advantage

Balanced Protein Mix

WHEY PROTEIN + PEA PROTEIN

+ SOY PROTEIN

Different in terms of Amino Acid Ratio, Bioavailability and their effects in repair and synthesis of muscles

WHEY PROTEIN	PEA PROTEIN	SOY PROTEIN
Works Faster after Ingestion	Works Faster and Quick absorption after Ingestion	Works easy and quick absorption.
Leans the body quicker & works in shorter time	Easily Digested.	Decreases stress on bones, increases stamina & improves blood sugar control.
Contains more of a fast Amino Acids Spike	Pea protein is not slouch with regards to its digestibility.	Contains fewer calories, less total fat and saturated fats.
Has more sulphur, Essential Amino Acids and BCAA's	Helps to lose weight, builds muscle and fights heart diseases.	Has low glycemic index.
Increases protein synthesis to a greater degree	Increases protein synthesis	Maintains lean muscle mass
Meets PDCAA's Ratio 0.91 below 1	Diary Free and Vegan	Meets PDCAA's Ratio of 1
	Meets PDCAA's Ratio 0.89 below 1	

Meal Essentials-Shake Mix

Nutrease™

A Nutritional CornerStone by PUGOS

One and only supplement with standardized plant based Vitamins & Minerals

Synthetic Vitamins & Minerals	"Natural" Vitamins & Minerals	Plant - Based Vitamins & Minerals
✗ Single / Isolated Vitamers	✗ Single / Isolated Vitamers	✓ Broad-spectrum mix of vitamers

Figure 1. Most "natural" vitamin supplements are chemically stripped down to a single vitamer, which are more closely related to synthetic vitamins than true plant-based vitamins.

Synthetic Vitamins & Minerals

- Are made up of industrial chemicals like petroleum derivatives (hydro carbons).
- Chemical structure varies compared to Natural and plant based vitamins & minerals.
- Doesn't contain broad spectrum of closely related vitamins, minerals and phytonutrients co-factors and conutrients.
- Has failed to protect against diseases.
- Less Bioavailable.
- They are less absorbed and have more risks of Side effects.

Plant-Based Vitamins & Minerals

- Extracted from fruits vegetables, herbs, fungi and other natural sources.
- Chemical structure and chemical diversity of vitamins and phytonutrients are naturally retained.
- contains broad spectrum of closely related Vitamins, Minerals, Phytonutrients, Co-factors, and Co-nutrients.
- Has shown effective protection role against diseases.
- Bioavailability is purely high.
- Highly absorbed and have very less side effects.

Synthetic / isolated vitamins

VS.

Broad-spectrum plant-based vitamins

SUPPLEMENT FACTS

Presentation: POWDER

Usage: As a food supplement. It is a combination of Natural vitamins and minerals, Natural Antioxidant & Phyto-Nutrients. NUTREASE POWDER, The Nature,s blend of protein,Fibers, plant extracts (phytochemicals) as balanced Nutrition for Adults.

Contra-indications

Product is contra-indicated in persons with Known hypersensitivity to any component of the product hypersensitivity to any component of the product.

Recommended usage

Once or twice a day along with portion controlled nutritious meals and exercise. One Serving (30g- 1 Scoop) provides 104 Calories, 11.61g of proteins, 6.64g of Fiber and 1.82g of Sugar per day. "Do not exceed the recommended daily dose".

Directions for Use

Take one level scoop (30g) with skimmed milkor water to make a cup of 200ml. Gently shake well in shaker or stir well until the powder is evenly dispersed and drink immediately.

Administration

Taken by oral route at any time with food.

Precautions

Food Supplements must not be used as a substitute for a varied and balanced diet in weight management program and in healthy lifestyle. This Product is not intended to diagnose, treat, cure or prevent any diseases. Do notexceed the recommended daily dose.

Warnings

If you are taking any prescribed medication or has any medical conditions always consults doctor or healthcarepractitioner before taking this supplement.

Side Effects

Mild side effects like nausea, headache and vomiting in some individuals have been reported.

Storage: Store in a cool, dry and dark place.

SUMMARY & CONCLUSION

Though supplementation of nutrients sometimes is necessary, physicians and dieticians recommend that nutrients come from Nutrease powder contains standardized plant-based vitamins and minerals which include a diverse mixture of substances including dozens of closely related vitamers and phytonutrients, not from synthetic vitamins and supplements. Excessive use of Synthetic vitamins and mineral supplements can lead to serious health problems and it is best to involve a physician to ensure that supplements are being used at appropriate and safe levels. It also is best not to change a diet without the advice of a nutritional expert or health care professional. People, who are chronically ill, and women who are pregnant or **breastfeeding** only should change their diets under professional supervision.

For adults (ages eighteen to forty-five or fifty), weight management is a key factor in achieving health and wellness. In order to remain healthy, adults must be aware of changes in their energy needs, based on their level of physical activity, and balance their energy intake accordingly.

As teenagers reach adulthood, the basal energy needs for maintaining the body's physiological functions (basal metabolic rate**,** or BMR) stabilize, and so energy requirements also stabilize. BMR is defined as the energy required by the body to keep functioning. These functions include the pumping of blood by the heart, respiration, kidney function, and maintaining muscle tone and a constant body temperature, among others. BMR is directly related to the amount of lean body muscle mass, size, and gender. Physical activity, especially weight-training exercises, help increase and maintain lean body mass.

It is very important to reduce one's energy intake at the onset of adulthood, and to make sure that all of one's nutritional needs are met. This can be accomplished by making sure that an adequate amount of energy is consumed (this will vary by body weight, degree of physical fitness, and muscle vs. body fat), and that this amount of energy is adjusted to one's level of physical activity. Foods that are chosen to provide the energy must be highly nutritious, containing high amounts of essential nutrients such as vitamins**,** minerals, and essential proteins**.**

It is usually at this age that young adults start gaining body fat and reducing their physical activity, resulting in an accumulation of fat in the abdominal areas. This is an ever-increasing risk factor in the population, where obesity is not only a problem in adults, but also in children. It is believed that the high level of obesity is mostly due to bad dietary practices

such as eating a high-fat, low-complex **carbohydrate** (low fiber) diet, including excessive amounts of meat. The indulgence in fast foods and a lack of regular physical activity are major factors. Obesity is a risk factor for other degenerative diseases, such as type II (adult onset) diabetes, diseases of heart and circulation, and certain cancers. Another nutritional problem related to eating such a diet is **constipation, due** to low-fiber diets. This may result in **hemorrhoids, diverticulosis, appendicitis,** and other more serious diseases of the lower intestine. Increasing the number of servings of fruits, vegetables, and whole grains in the diet will prevent these diseases.

At the onset of adulthood, energy requirements usually reach a plateau that will last until one's mid-forties, after which they begin to decline, primarily because activity levels and lean muscle mass (amount of muscle vs. body fat), which represents the BMR, decrease. It is believed that the changes in body composition and reduced lean muscle mass occur at a rate of about 5 percent per decade, and energy requirements decrease accordingly. However, these changes in body composition and decreased energy requirements can be prevented by maintaining regular physical activity, including resistance training, which helps maintain lean muscle mass and prevent deposition of excess body fat.

The basal metabolic rate, the number of calories a person's body uses while at rest—generally decreases with age. Good health requires adults to adapt their diets to the body's changing needs by eating low-fat and nutrient-rich foods.

By preventing normal age-related decline in lean muscle mass, one can prevent obesity and prolong one's physiological age. The result is that a person is less vulnerable to degenerative diseases, such as cardiovascular diseases, cancer, and diabetes, and can usually perform at a higher level than his or her chronological age would otherwise allow.

Older adults who are not physically active or who have poor nutritional practices will have a decline in BMR, a change in body composition, an increasing percentage of body fat, and a decrease in lean body muscle mass. In addition, they will show the signs of aging and will be more likely to develop degenerative diseases.

Many older adults need to take medications to control the advance of diabetes, hypertension, and cardiovascular disease. Medications can interfere with proper nutrition, however, as they affect appetite, the digestion and **absorption** of nutrients, and normal function of the digestive system.

As women age, they may develop osteoporosis if they have not built up strong bones by eating foods high in calcium & adequate **vitamin D.** Women start losing calcium from bones during and after the onset of menopause at the rate of 1 percent per year for about five years, after which the rate of calcium loss is reduced until about age seventy-five or eighty. Therefore, it is important for women to eat foods high in calcium up to the age of thirty-five. The recommended daily intake of calcium is 1,200 milligrams. This requirement can be met by consuming four servings of dairy products and two servings of green vegetables each day. It is well established that calcium from foods is much better absorbed than calcium from supplements. It is beneficial, therefore, to choose foods with high calcium content, such as low-fat or skim dairy products. This regimen builds a bone density high enough so that, at menopause, losing approximately 5 percent of bone density in five years does not place a woman in the "fracture zone," where bones can break as a result of osteoporosis.

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