Nyam News
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DIETARY SUPPLEMENTS – 1

A dietary supplement is a product taken by mouth which is intended to increase usual intake of the dietary ingredients it contains. Some of these dietary ingredients include:

- Nutrients
  - o Vitamins, e.g. folate, ascorbic acid, thiamin e.g.;
  - o Minerals, e.g. calcium, iron, chromium, etc.;
  - o Proteins and amino acids, e.g. taurine;
  - o Fatty acids and other lipids;
- Herbs or other botanicals, e.g. gingko biloba, ephedra, aloe vera, evening primrose oil;
- Fibre e.g. psyllium, gum;
- Enzymes and extracts from organs or glands e.g. creatine;
- Concentrates, metabolites, or constituent of these ingredients.

Dietary supplements are usually offered as an addition to the diet and not as a conventional food or as the sole item of a meal or diet.

Dietary supplements are marketed in differing forms and presentations according to the product category.

- Tablets, capsules and softgels e.g., vitamins, minerals and amino acids
- Syrups e.g. multivitamins/ minerals
- Fresh or dried products e.g., leaves, roots, and bark;
- Teas made by steeping fresh or dried botanicals/ herbs in boiling water.
- Decoctions made by simmering roots, bark and berries etc. in boiling water for long period to extract the desired ingredients;
- Tinctures made by soaking a botanical in a solution of alcohol and water;
- Extracts made by soaking the botanical in a liquid that removes specific types of chemical. The resulting liquid can be used as is or evaporated to make capsules or tablets;
- Powdered drink mixes;
- Energy drinks fortified beverages.

Are They Necessary

Many experts feel that most people who have access to a

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balanced diet can usually obtain all the nutrients they require from their regular food intake. Eating a balanced diet will provide the right type of foods to supply enough of the macro-nutrients (carbohydrates, fat and protein) and micronutrients (vitamins and minerals) needed for general good health and energy. People should therefore be encouraged to select a balanced diet, i.e., a variety of foods from all the food groups in the right proportions daily, before considering taking dietary supplements. Persons who are unable to or choose not to eat a particular food or type of food, e.g., dairy products or meat, can be guided in making meal selections that will provide similar nutrients in adequate amounts.

There are some circumstances in which dietary supplements are necessary, for example:

- Persons whose caloric intakes and severely restricted, so that intakes of nutrients may be insufficient;
- Persons at risk of deficiency of particular nutrients e.g. persons not exposed sufficiently to sunlight who will require extra vitamin D; women who have heavy menstrual periods may require extra iron;
- Persons who limit intake of certain foods or food groups e.g. vegans, who may be at risk of vitamin B_{12} deficiency;
- At certain stages during the life cycle e.g. pregnancy, when prenatal supplements (particularly iron and folic acid) are recommended; and for elderly persons who have adequate intake or experience problems absorbing or metabolizing food;
- In particular health conditions and diseases, which result in inadequate intake or absorption of nutrients or excessive losses e.g. through diarrhoea.

Consumers who have been advised to take supplements for these or any other reasons should consult a knowledgeable health-care professional, who can provide the necessary information about the need for supplements, the form of supplement to acquire, dosage, duration of use and possible interactions to assist the consumer in making the right choice.

Many persons with chronic diseases also turn to supplements either as a treatment alternative to drugs or along with their drug regimens.

Safety Issues

Like drugs, dietary supplements may have risks and side effects. Unlike drugs, however, dietary supplements are mostly self-prescribed with little or no input from informed health care providers. Often there is little or no direction on the label to guide the consumer, and as a result some consumers, believing that the higher the dosage the better the result, therefore engage in megadosing.

Most vitamins and minerals are safe at a wide range of dosage levels. Some vitamins are remarkably safe even when taken in very large quantities. Notwithstanding, there are some minerals that are hazardous when taken at levels that are higher than the RDA. It is therefore important that caution statement advising consumer to consult with their physician, nutritionist, dietitian before taking.

Due to the potential dangers of many supplements, it is important for consumers/ clients to always tell healthcare professionals with whom they interact about supplements they are taking. On the part of healthcare professionals, it should be noted that not in all cases will clients taking supplements disclose the fact unless asked, and so the issue should be raised and discussed.

Among the various health risks posed by these products are high blood pressure, seizures, tachycardia (rapid heartbeat), arrhythmia, palpitations, heart attack, stroke and sudden death. The active pharmaceutical ingredients contained in these products include:

Sibutramine: an appetite suppressant available by prescription only and a controlled substance).

Fenproporex: a controlled substance not approved for marketing in the United States.

Fluoxetine: an antidepressant available by prescription only;

Bumetanide: a potent diuretic available by prescription only;

Furosemide: a potent diuretic available by prescription only;

Rimonabant: a drug not approved for marketing in the United States;

Cetilistat: an experimental obesity drug not approved for marketing in the United States;

Phenytoin: an anti-seizure medication available by prescription only;

Phenolphthalein: a solution used in chemical experiments and a suspected cancer-causing agent that is not approved for marketing in the United States.

There are several other products for which the FDA has issued warnings for reasons such as contamination with other un-labeled herbs, pesticides, heavy metals, or prescription drugs, and dangerous interactions with prescription drugs. These include:

- Ephedra
- Kava
- Some "dieter's teas"
- L-tryptophan
- PC SPES and SPES
- Aristolochic acid
- Comfrey
- St. John's wort
- GHB (gamma hydroxy-butyric acid), GBL (gamma butyrolactone), and BD (1,4-butanediol).
- Certain products, marketed for sexual enhancement and claiming to be natural versions of the drug Viagra.

List of Tainted Weight Loss Products
Published by US Food and Drug Administration, March 2009

2 Day Diet	Perfect Slim
2 Day Diet Slim Advance	Perfect Slim 5x
2x Powerful Slimming	Perfect Slim Up
3 Day Diet	Phyto Shape
3 Days Fit	Powerful Slim
3x Slimming Power	ProSlim Plus
5x Imelda Perfect Slimming	Reduce Weight
7 Day Herbal Slim	Royal Slimming Formula
7 Days Diet	Sana Plus
7 Diet	Slim 3 in 1
7 Diet Day/Night Formula	Slim 3 in 1 Extra Slim Formula
8 Factor Diet	Slim 3 in 1 Extra Slim Waist Formula
Eight Factor Diet	Slim 3 in 1 M18 Royal Diet
21 Double Slim	Slim 3 in 1 Slim Formula
24 Hours Diet	Slim Burn
999 Fitness Essence	Slim Express 4 in 1
BioEmagrecim	Slim Express 360
Body Creator	Slim Fast*
Body Shaping	Slim Tech
Body Slimming	Slim Up
Cosmo Slim	Slim Waist Formula
Extrim Plus	Slim Waistline

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Extrim Plus 24 Hour Reburn	Slimbionic
Fasting Diet	Sliminate
Fatloss Slimming	Slimming Formula
GMP	Somotrim
Herbal Xenicol	Starcaps
Imelda Fat Reducer	Super Fat Burner
Imelda Perfect Slim	Superslim
JM Fat Reducer	Super Slimming
Lida DaiDaihua	Trim 2 Plus
Meili	Triple Slim
Meizitang	Venom Hyperdrive 3.0
Miaozi MeiMaoQianZiJiaoNang	Waist Strength Formula
Miaozi Slim Capsules	Xsvelten
Natural Model	Zhen de Shou

**This product (Slim Fast) should not be confused with the line of meal replacement and related products that are marketed as conventional foods under the brand name "Slim-Fast".*

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