

## SCIENTIFIC AND CLINICAL STUDIES:

*Optimeal™* is based on solid scientific research and contains the most exciting natural ingredients available. The natural ingredients in *Optimeal™* not only produce a noticeable 'meal' of short- and long-term energy, but they also assist many vital functions of your body, including anti-aging and Weight loss!

**Soy in Optimeal:** Lower LDL (the bad) cholesterol and reduces the risk of heart attack and stroke. It provides antioxidants, boosts the immune system, and lowers the risk of atherosclerosis, heart disease, and hypertension. *Sept. 1, 2006 issue of The American Journal of Cardiology.*

**Whey in Optimeal:** a high biological value protein is a good choice for diabetes. Whey protein is an excellent protein choice for cancer patients. Boosts the immune system by raising glutathione levels. Helps keep protein intake balanced and weight loss on track, repairs and maintains body tissues, produces hemoglobin to carry oxygen to the cells, produces antibodies, enzymes, and hormones, and supports the immune system. *American Journal of Clinical Nutrition, July 2005*

**Green tea in Optimeal:** contains anti-oxidants which may have a protective effect against cancer. *BBC News Dec 22, 2005*

**Aswagandha:** a unique herb with anti-stress adaptogenic action that leads to better physical fitness. It has anti-tumorous properties. *Clinical Research Journal April 2007.*

**Fiber:** Combats constipation, in the bowel, bacteria converts fibre into short chain fatty acids, which provide energy for the body and may help protect against cancer. *National Institute of Diabetes and Digestive and Kidney Diseases*

**Natural Vitamins and Minerals:** Helps to cope with life's daily stress. *New York Times - Wed, 07 Mar 2007*

### Soy Serves Up Healthy Benefits in Optimeal™:

Areas of health that are or may be enhanced by soy consumption include:

#### Heart Health

In 1999, the *Food and Drug Administration (FDA)* approved the use of a health claim on food labels related to soy protein and the reduced risk of heart disease.

According to research, there are several ways that intake of soy protein with naturally occurring isoflavones can improve heart health. Intake of soy protein may: Improve plasma lipids *Am J Clin Nutr. 2000 Jun; 71(6):1462-9*; its effect is more pronounced in people with elevated cholesterol levels while maintaining HDL concentrations. (*Amer J Clin Nutr 68:545-551, 1998*).

May increase the elasticity of arteries. (*Nestle et al., 1997*).

May reduce the build-up of plaque inside arterial walls. *Life Extension Magazine August 1996*

#### Blood Pressure

Research suggests that the consumption of soy protein with naturally occurring isoflavones may be linked to lower blood pressure. *July issue of Annals of Internal Medicine (143, 1:1-9, 2005)*

## Bone Health

A new study published in the *Archives of Internal Medicine* in September 2005 found that intake of soy was associated with a significantly lower risk of bone fracture, particularly among early post-menopausal women.

## Cancer Risk

Epidemiological and etiological studies demonstrate that consumption of Soya foods is associated with a lower risk of certain cancers. *NutraCos, 2003 (Vol. 2) (No. 6) 36-37*

## Menopausal Symptoms

Studies that examined soy protein consumption in peri-menopausal women have found promising results. "In women receiving 60 mg isoflavones daily, hot flashes and night sweats were reduced by 57% and 43%, respectively" *Menopause. 2007 Feb 6*

## Diabetes Management

Soy protein may influence insulin activity in the body. Soy, and its many components, may also favorably alter glycemic control. Consumption of soy protein has been associated with the reduction of several chronic complications associated with diabetes, including cardiovascular disease and high blood pressure (*Diabetes Care 2002 Oct; 25(10):1709-14*).

## Benefits of Whey Proteins in Optimeal™:

Whey protein is an excellent protein choice for individuals of all ages who value the role of a healthy diet in helping to maintain and improve their health.

## Improved Body Composition

Whey protein combined with BCAA and glutamine leads to improved body composition (increase lean muscle mass) and resistance exercise performance. Whey protein supplementation may help decrease body fat. *Curr Ther Res Clin Exp, 2000; 61:19-28*.

## Weight Management

Studies show that achieving and maintaining a healthy weight can add years to your life and help prevent weight related complications, including diabetes, cancer, and heart disease. Diet plays a key role in any weight management program and adding whey protein often helps make a positive difference. Here are some of the reasons why.

- The body requires more energy to digest protein than other foods (thermic effect) and as a result you burn more calories after a protein meal.
- Whey protein isolate is pure protein with little to no fat or carbohydrates. It is a perfect complement to any low carbohydrate or low glycemic index diet plan.
- Protein helps to stabilize blood glucose levels by slowing the absorption of glucose into the bloodstream. This in turn reduces hunger by lowering insulin levels and making it easier for the body to burn fat.
- Adding whey protein to a mid-day snack or beverage provides healthy energy and may help control food intake at the next meal.

## Diabetes

For people with type 2 diabetes, adding whey to high-carbohydrate meals stimulates insulin release and reduces spikes in blood glucose levels after meals. *American Journal of Clinical Nutrition, Vol. 82, No. 1, 69-75, July 2005*

## Cardiovascular Health

Hypertension (high blood pressure) is one of the leading causes of heart disease and stroke. Exciting new research has shown that whey protein may help in the battle against hypertension. Both human clinical and animal studies found that a hydrolyzed whey protein isolate assisted in reducing the blood pressure of borderline hypertensive individuals. *JClinHypertens. 2006Nov; 8(11): 775-82.*

## Cancer

Whey protein is an excellent protein choice for cancer patients as it is very easy to digest and very gentle to the system. Whey protein is particularly rich in substrates for GSH synthesis. And it may be exerting its effect on carcinogenesis by enhancing GSH concentration. *Cancer Lett. 1991 May 1; 57(2):91-4.*

## Infant Nutrition

Whey protein contains many of the same components found in human breast milk and for this reason is a key ingredient in a wide variety of infant formulas, including those for premature infants. *International Journal of Food Science & Technology, Volume 34, October 1999, pp. 533-542(10).* Certain types of whey protein based infant formulas have also been shown to help reduce crying in colicky infants. While breast-feeding is preferred, infant formulas containing whey protein are the next best thing when breast-feeding is not an option. Pregnancy can increase the body's protein needs by up to 33%.

## Healthy Aging

Whey protein contains an ample supply of the amino acid cysteine. Cysteine appears to enhance glutathione levels, which has been shown to have strong antioxidant properties -- antioxidants mop up free radicals that induce cell death and play a role in aging. *Journal of Nutritional Biochemistry 2003; 14, 251-258.* A recent study conducted at *Boston University* showed that a nutritious diet including whey protein may help keep bones and muscles healthy and strong.

## Basic benefits of dietary fiber in Optimeal™:

- It helps in constipation, diverticulosis, diarrhea and aches assisting hemorrhoids, prevents colon cancer and rectal cancer. *Web MD October 13, 2007.*
- Pre-menopausal women who eat large amounts of fibre could halve their breast cancer risk *BBC NEWS, Wednesday, 24 January 2007*
- Studies have shown that dietary fiber provides other health benefits by reducing the risk of diabetes, heart disease and intestinal problems. April issue of *Harvard Men's Health Watch.*
- It helps fight against obesity, in weight loss and weight reduction. Soluble fiber helps remove LDL (bad) cholesterol from your circulatory system. It absorbs water, by what it expands and fulfills stomach decreasing hunger

and also delaying the moment in which food leaves stomach. *Prevention fitness system article.*

- High intakes of dietary fibre have been identified by the World Health Organization (WHO) as being able to protect against obesity and weight gain. *2003, WHO Technical Report Series 916.*
- Fibre is a quiet achiever, not only keeping you regular and helping prevent health problems, but it can also promote a feeling of 'fullness' that helps you manage your weight. *Nutrition, 2005 Mar; 21(3):411-8.*
- *It decreases level of cholesterol and triglycerides.*  
Soluble dietary fiber (pectins) is decomposed to tricarboxylic fatty acids which are responsible for inhibition of cholesterol biosynthesis in liver. Thanks its consistency it catches and removes gall acids from intestines. Because liver uses them to cholesterol production, the cholesterol level drops down when they have been expelled. Expelling of gall acids is a main way of cholesterol excess removing by organism, because it cannot be metabolized as other fats. Insoluble dietary fiber decreases level of triglycerides in blood by what it reduces the hazard of arteriosclerosis.
- *It stabilizes glucose concentration in blood.*  
Dietary fiber postpones carbohydrate transformation by partial blocking of access of glucose to blood, what next increases insulin secretion and helps in keeping stable sugar level in blood.
- *It purifies organism from toxins and heavy metals.*  
Soluble and insoluble dietary fiber helps to eliminate from organism toxins, gall acids, heavy metals and even carcinogenic substances.

### **Additional important information and benefits of dietary fiber:**

- High dietary fiber dose may lower efficiency of other medicines e.g. oral contraceptives and medicines decreasing cholesterol concentration. One should keep a 2-hour interval between a meal and such medicine taking.
- Dietary fiber may restrict absorption of nutrients such as iron, magnesium, phosphorus, zinc and calcium. Fiber users are advised to avoid taking supplements at the same time as, or soon before or after, taking vitamin or mineral supplements.
- Dietary fiber in large intestine (colon) absorbs water. If there is not enough water stool will be hard and dense, it may also cause constipation. To minimize fiber effects and optimize elimination of by-products of metabolism at least 2 liters of water ought to be provided.

*Even when you're under the weather, or with a sore throat and finding it hard to eat, optimeal™ can take a bite out of hunger and provide you with the nutrients your body may need to recuperate.*