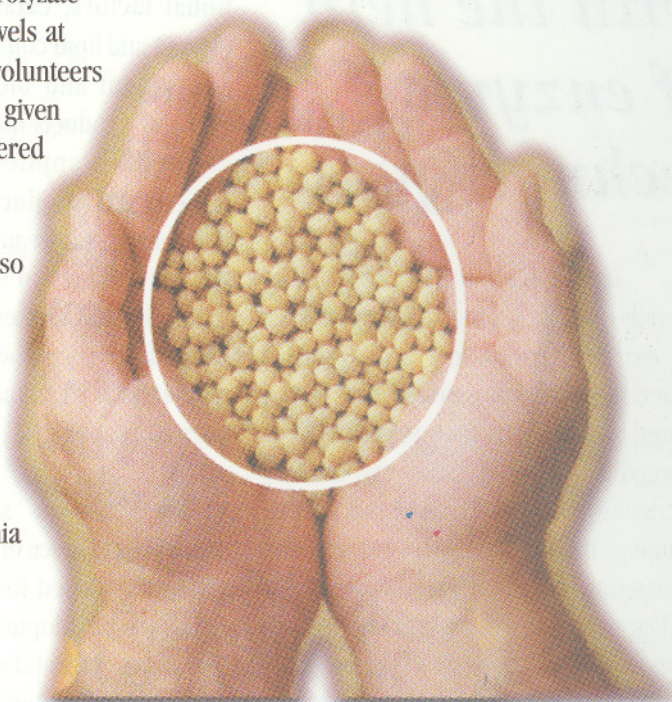


### *Soy protein hydrolyzate with bound phospholipid reduces serum cholesterol in human*

Hori and his team studied the effects of soy protein hydrolyzate with bound phospholipids (c-SPHP) on the serum cholesterol levels at Health Care Products Department, Japan. Taiwanese adult male volunteers whose serum total cholesterol levels were above 220 mg/dl were given 3 g c-SPHP per day for 3 months. Test diets were orally administered in a powdered drink form that contained c-SPHP. After 3 months serum total cholesterol decreased significantly from the initial level and both LDL and HDL ratio also reduced significantly. Soy protein hydrolyzate is known to have a bitter taste and the phospholipids are highly hydroscopic which limits the range of application of these materials as food ingredients. But these adverse properties have been improved c-SPHP because of its binding of peptides and phospholipids. Therefore, c-SPHP may be widely used in a variety of foods as a unique, safe and effective ingredients against hypercholesterolemia (Hori *et al*, *Biosci Biotechnol Biochem*, 2001, **65**, 72).



### *Soy protein isolate and its hydrolysate are good for reducing genetical obesity*

To ensure normal functioning of body it is essential to maintain body weight and control obesity. In India obesity is a common problem because of certain reasons: one is genetic; another is avoiding laborious work and the third one excessive energy intake. However, now-a-days growing concern among both young women and men is inappropriate weight reduction at health centers. In such cases the intake of protein from meals is extremely important.

It is well known that soy protein has a better hypocholesterolemic effect when compared with animal proteins such as casein. Also the studies have shown that milk whey protein, in contrast to milk casein, decreased serum cholesterol in the same as soy protein. A seeding trial on obese animals conducted by Japanese scientists revealed that soy protein and its peptide are more effective than milk casein in reducing the body fat while maintaining the body protein. In order to confirm the anti-obesity action of soy protein isolate (SPI) and its hydrolyzate (SPI-H) Aoyama and his team studied and compared action of SPI and SPI-H with the corresponding milk whey protein and SPI-H in genetically obese (yellow KK) mice. The results of their study indicated that soy protein and its peptide are appropriate protein sources for weight reduction and it is a good dietary mean to treat diabetes mellitus (Aoyama *et al*, *Biosci Biotechnol Biochem*, 2000, **64**, 2594).