

Significant Sources of Myo-Inositol (MI)

Endogenous synthesis: 2-4g MI/day may be produced from glucose in humans.

MI occurs in foods as:

- 1. Phytic acid** (also called myo-inositol hexaphosphate or IP6) is often a component of the insoluble fiber of the bran found in seeds. Significant amounts of IP6 are found in grains, legumes, nuts or certain citrus fruits.
- 2. Phosphatidyl-myo-inositol** is found in plant and animal-derived foods. Estimated average MI intake is 900 mg/day

Supplements: MI and IP6

Significant sources of D-Chiro-Inositol (DCI)

Foods: buckwheat, soy, lentils, beans, wheat germ

Supplements: DCI (derived from demethylating pinitol found in carob)

Significant sources of D-Pinitol (methylated DCI)

Foods: carob, soy

Supplements: pinitol

Inositol Phosphates IP1 to IP6

IP6 is converted to MI or IP1 to IP5 by intestinal flora and in human metabolism

**(MI)
Myo-Inositol**

**Phosphatidylinositols (PI) &
Phosphatidylinositol-
Phosphates (PIP)**

MI to DCI conversion (about 8%) is catalyzed by an epimerase enzyme. Its activity may be reduced in the state of insulin resistance to as low as 1%, for example.

D-Chiro-Inositol (DCI)

Approx. 33% of pinitol may be converted to DCI in humans. It is not clear if pinitol can be utilized in human physiology without first being converted to DCI

D-Pinitol (Methylated DCI)