VITAMIN B₃
B Vitamins: Establishing Healthy Growth

VITAMIN B₃ BASICS
Also known as: Niacin
Important for: Growth, nervous system
Animal Sources: Liver, kidneys, heart, fish, meat
Grain/Fruit/Vegetable Sources: Yeast, cereals, avocados, figs, dates, prunes, nuts, legumes

OVERVIEW
Vitamin B₃ is a water soluble vitamin that is part of the vitamin B complex group. Vitamin B₃ plays an important role in all metabolic processes in the body and is required for growth. It can be acquired from diet, as well as produced in small amounts from the amino acid, tryptophan.

DISCOVERY AND HISTORY
In 1937, biochemist Conrad Elvehjem identified nicotinic acid in fresh meat and yeast. This compound, now known as niacin, is vitamin B₃. This discovery led to a cure for pellagra, a disease related to vitamin B₃ deficiency and characterized by “the four D’s”: dermatitis (skin inflammation), diarrhea, dementia (confusion) and eventually, death.

VITAMIN B₃ DEFICIENCY
Dietary surveys indicate that 15 to 25 percent of older adults do not consume enough vitamin B₃ in their diets to meet the recommended intake values. Severe vitamin B₃ deficiency leads to pellagra; this is rare in developed countries except for in chronic alcoholics. In developing countries, particularly where maize and barley are the major staples, vitamin B₃ deficiency persists. India, China and parts of Africa are places where populations still suffer from vitamin B₃ deficiency. Symptoms include:

- Pellagra
- Skin lesions
- Diarrhea
- Confusion
- Digestive inefficiency
- Insomnia
- Fatigue
- Loss of appetite
- Indigestion
- Canker sores
- Vomiting
- Depression

POPULATIONS AT RISK OF VITAMIN B₃ DEFICIENCY
- Populations who only eat maize or barley as the major staples
- Alcoholics