

Vitamin B3 needed for skin damage by Tessa Jupp RN

This Australian study came across my desk early last year but as I was concentrating on blood sugar control and sleeping there has not been room in the newsletter to deal with it until now. Needless to say, when this hit the News towards the end of last year, local shops ran out of B3!

However this is not a new story, as anyone who has my booklet from January 2012 "*Putting a Face to Nutritional Deficiencies*", would know. I have pictures of sun skin damage on the B3 page and the old fashioned name for it - "Pellagra". The pictures on the front page of this newsletter give you easy commonly recognisable vision of skin lesions that B3 might help with. Others are below.

As the study found, if you stop taking the B3 tablets, the problem will return. This is because B3 along with all the vitamins, minerals, amino acids etc that we should be getting in our foods, are there as part of our diet every day to keep our bodies ticking along in good health. We need them all on a regular basis for the body to work properly.

So let's look at **PELLAGRA**.

Known as the 4 D's, the symptoms were **Dermatitis, Diarrhoea, Dementia and Death!** B3 is essential for life.

A disease that disappeared after World War 2, when more was discovered about the need for vitamins and minerals in the diet. In America, the Red Indians had traditionally added a handful of potash from the cooking fires to the water they boiled their corn in. This releases the B3 in the corn so that it can be digested from cereals and grains. So normally, we don't get B3 in grains as it is locked in. **Best food sources are red and white meats, salmon and tuna and some nuts.** Other fish and vegetables are fairly low.

Pellagra occurs as a direct result of Vitamin B3 deficiency and can be cured with Vitamin B3 supplementation.

Pellagra may Cause these Ailments - (Hyperhealth 2009)

Digestive System

Poor Appetite may occur as a result of Pellagra.

Diarrhea may occur as a result of Pellagra.

Nervous System

Anxiety may occur as a result of Pellagra.

Depression may occur as a result of Pellagra.

Nervousness may occur as a result of Pellagra.

Psychosis may occur as a result of Pellagra.

Skin

Dermatitis & ulcers may occur as a result of Pellagra.

Painful, swollen tongue may occur as a result of Pellagra.

DOSE: We need 1-2 of B3 x 500 mg taken twice a day.

Dry scaly skin patches, with excessive thick skin that may be horny. Also thick dry skin on hands and feet that may crack and bleed, particularly in winter. Paint with iodine.

Trial of B3 for Skin-Cancer prevention

Published in New England Journal of Medicine 2015.

B3 is available over-the-counter in most countries, and is generally considered **safe and affordable**. It was very well tolerated, with patients showing no signs of adverse events, including no changes in blood pressure or other blood results. The findings have the potential to decrease the health and economic burden of skin cancer; the most common kind of cancer in fair-skinned populations all over the world.

"This is the first clear evidence that we can reduce skin cancers using a simple vitamin, together with sensible sun protections," said the study's senior author, Dr Diaona Damian. *"We hope that these findings can be immediately translated into clinical practice. However, people at high risk of skin cancer still need to practice sun-safe behavior, use sunscreens, and have regular check-ups with their doctor."*

Despite intense sun protection campaigns, non-melanoma skin cancer rates continue to increase worldwide. In Australia, the Cancer Council finds that skin cancers affect more than half of the population; costing Australia over \$500 million every year.

This new study builds on a long history of research on **nicotinamide**, many of which suggested the vitamin B3 derivative enhances the repair of UV-damaged skin. It has also been shown to protect the skin's immune system from UV radiation, by way of providing cells with an extra energy boost.



Signs of low B3 - mouth ulcers, or geographic tongue. Scaly redish, brownish skin lesions on arms, legs, face.

