Serum Dioxin Testing

What is a serum dioxin test?
A serum dioxin test is a blood test that can detect the amount of dioxin in blood today.

What does a serum dioxin test involve?
You have to have at least 90 millilitres of blood taken. The blood must be taken at a medical laboratory so that it can be quickly processed. The processed blood sample is then sent to a laboratory with the facilities to test for dioxin. The results of the test will be sent to your doctor. The doctor will discuss these results with you. Generally, the test can take some time to complete because it is complicated.

What can a serum dioxin test tell me about my exposure to dioxin?
People can have their blood serum tested to see how much dioxin it contains today. This test is not recommended. It cannot accurately tell you what your past exposure was. A person who had a high level of exposure in the past may have a serum dioxin test which shows low or minimal levels of dioxin now. The amount of dioxin in a person’s body naturally decreases over time. How fast it decreases over time depends on many things including how old the person was when they were exposed, weight gain or loss, etc.

Serum dioxin tests:
- could mislead a person about their past exposure to dioxin
- could mislead a person about their current health risks.

How can I reduce my current exposure to dioxins?
About 90 percent of New Zealanders’ current exposure comes from food. People can reduce their exposure by reducing the amount of animal fat they eat (but it is not recommended that all fat be eliminated because a moderate amount is part of a healthy balanced diet). Not smoking and not burning rubbish, particularly plastics or driftwood, all help to reduce exposure.

Previous studies of the New Zealand population show that dioxin levels have dropped by as much as 70 percent in the ten years from the late 1980s. This will continue to decline.

How can I get a serum dioxin test through the Health Support Service for Dioxin Exposed People?
Firstly, you must be eligible for the Health Support Service for Dioxin Exposed People. You will then need to talk about serum dioxin testing with your doctor. Because of the limitations of the test, it is very important that you are fully informed about these. If your doctor thinks that the test will help you, the doctor can make an application for special approval for the test. If the special approval is granted, you will be sent a referral letter to take to the laboratory to have your blood taken.
How much will the serum dioxin test cost?

The serum dioxin test will be free if you meet the eligibility criteria for a publicly funded serum dioxin test.

Because of highly specialised nature of the serum dioxin test and the small number of service providers, serum dioxin tests are very expensive. Generally, the test will cost about $2,500 per test.

Are there other tests available?

The amount of dioxin in the blood serum correlates to the dioxin stored in body fat. Serum dioxin testing is the preferred way of testing because it is less invasive than taking a sample of body fat.

Where can I get more information?

You can get more information about dioxin exposure, its health effects, and the Health Support Service for Dioxin Exposed People from the Ministry of Health.

Our contact details are:
Ministry of Health
PO Box 5013
Wellington
Email: emailmoh@moh.govt.nz
Telephone: 0800 288 588
Website: www.moh.govt.nz/dioxins