

# GENOVA Bisphenol A (BPA)

*The Bisphenol A Profile can help identify exposure to the common endocrine disruptors Bisphenol A (BPA), Triclosan, and 4-nonylphenol.*

## Why perform endocrine disruptors exposure testing?

Endocrine disruptors weakly bind to estrogen receptors which can affect the endocrine, nervous, and immune systems as well as block thyroid hormone action. Exposure to chemicals that are xenoestrogens disrupt the proper function of the body's endocrine system. Children and babies in the womb are most susceptible to hormonal and neurological development issues from exposure.

Evaluate levels of these endocrine disruptors with the Bisphenol A Profile to determine if avoidance and detoxification are needed.

## What are Bisphenol A, Triclosan and 4-nonylphenol?

### Bisphenol A (BPA)

BPA is found mostly in plastics labelled with the recycling codes 3 or 7. BPA is a key monomer used to produce polycarbonate plastic. This type of plastic is usually clear and shatter-proof. Other uses of BPA consist of epoxy resins, which are used to coat the inside of food and beverage cans. BPA studies have been linked to obesity, neurological development delays in infants, thyroid disruption, developmental issues of sexual organs in infants, and sexual dysfunction in adults. Exposure to BPA occurs mostly through digestion of food and liquids that have been stored and heated in plastic materials.



### Triclosan

Triclosan is an antimicrobial and preservative agent used in personal care products such as toothpaste, shaving cream, and hand soaps. Exposure occurs from use of these products in the home. Triclosan bioaccumulates in the body and is considered to block thyroid activity affecting metabolism and thyroid hormone signalling.

### 4-Nonylphenol

Often used as a surfactant, 4-nonylphenol is found in industrial detergents, foaming agents, dispersants, and emulsifiers. Most exposure is through the skin. 4-Nonylphenol is also an endocrine disruptor.

## SIGNS & SYMPTOMS OF POSSIBLE TOXICITY

|                                    |  |
|------------------------------------|--|
| ADD/ADHD                           | Adult onset Diabetes                           |
| Allergies                          | Asthma   |
| Autoimmune conditions              | Brain fog                                      |
| Chemical sensitivities             | Chronic bacterial, fungal and viral infections |
| Chronic neurological illnesses     | Cognitive difficulties                         |
| Development disorders              | Early puberty                                  |
| Fatigue                            | Fibromyalgia                                   |
| Hormonal imbalances                | Infertility                                    |
| Increased risk of cancer           | Mood disorders                                 |
| Neurological development disorders | Obesity  |
| Reproductive system disorders      | Thyroid disruption                             |

## SOURCES OF EXPOSURE

| BPA                        | TRICLOSAN         | 4-NONYLPHENOL |
|----------------------------|-------------------|---------------|
| Baby bottles               | Deodorant         | Detergents    |
| Water bottles              | Toothpaste        | Pesticides    |
| Food containers            | Shaving cream     |               |
| Beverage containers        | Mouthwash         |               |
| Plastic dinnerware         | Hand soaps        |               |
| Thermal paper receipts     | Cosmetics         |               |
| Medical and dental devices | Cleaning supplies |               |
| Eyeglass lenses            | Children's toys   |               |

## Genova BISPHENOL A (BPA) (urine) [4106]

- ❖ Bisphenol A (BPA), 4-Nonylphenol, Triclosan



## Other environmental toxin tests available

- **Genova Phthalates & Parabens Profile (urine) [4101]:** MEHHP, MEOHP, MEHP, MEtP; Butylparaben, Ethylparaben, Methylparaben, Propylparaben
- **Genova Chlorinated Pesticides (blood) [4102]:** DDE (p,p1), DDT (p,p1), Dieldrin, Heptachlor Epoxide, Hexachlorobenzene (HCB), Mirex, Oxychlorodane, Endosulfan Sulfate, Trans-Nonachlor
- **Genova Polychlorinated Biphenyls (PCBs) (blood) [4103]:** PCB 118, PCB 126, PCB 138, PCB 153, PCB 156, PCB 169, PCB 180, PCB 74, PCB 77
- **Genova Volatile Solvents (blood) [4104]:** Benzene, Ethylbenzene, Styrene, Toluene, Xylene, Hexane, 2-methylpentane, 3-methylpentane
- **Genova Organophosphates (urine) [4105]:** Atrazine, Atrazine Mercapturate, Diethyldithiophosphate (DEDTP), Diethylthiophosphate (DETP), Dimethyldithiophosphate (DMDTP), Dimethylthiophosphate (DMTP)

## How to order a test kit:

To order a test kit simply request the test name or test code on a NutriPATH request form and have the patient phone **NutriPATH Customer Service** on **1300 688 522**.