




# Workshop: Understanding the Relationship between Physical Symptoms and traumatic experiences

## PART 5- Other physical problems linked to complex trauma



Pride in our adults and specialist mental health services

A close-up photograph of a person wearing a white lab coat, pouring capsules from a blister pack into their open palm. The background is softly blurred, showing a blue garment. The text is overlaid in the center of the image.

Some other physical consequences of exposure to chronic stress (prolonged release of cortisol)

# Summary

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- Increased blood glucose level (risk of diabetes)- remember that cortisol's main job is to release glucose- this is bad news for diabetes
- Abnormal immune system activity (due to chronic inflammation)
- Weight gain and fluid retention
- Increased inflammation (and associated illnesses)
- Increased allergies
- IBS symptoms



# Diabetes

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- Cortisol prepares your body for action by releasing glucose
- This is fine if you use up the glucose (by running)- but if the stressors are in your house, and ones that you have to freeze to there is chronic excess glucose in your blood stream





## Weight gain and cortisol

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Cortisol tells your brain it is under threat.

If that threat is ongoing your brain “prepares for the worst” and lays down more fat cells in your stomach

Fat cells in the stomach have four times more cortisol receptors compared to fat cells elsewhere- which means they also contribute to a cortisol overload

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Furthermore, the hypothalamic-pituitary-adrenal axis and the sympathetic nervous system are both involved in regulating metabolism

# Increased inflammation and associated diseases

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- Winding back... When cortisol is released, it suppresses a whole bunch of stuff including inflammation (your body is not bothered by repair when stressed)
- The Compensatory “Hypocortisolism” (the permanent turning down of the hot water in the bath) leads to a correspondence permanent increase in inflammation (*“a state of stress-induced hypocortisolism may result in a persistent inflammatory response that impairs healing”*)
- Excess inflammation has shown to be related to osteoporosis, myopathies, and idiopathic neuropathies
- Low cortisol awakening responses have been associated with poor overall health, acquired immunodeficiency syndrome, and cancer

# Increased Allergies

- Allergies may flare up, or you may develop new ones
- Just over 60% of your immune system is located in your digestive system. **If your digestive tract is full of inflammation from increased cortisol levels, your immune function will be severely compromised.** An Ohio State University study found an increase in allergy flare ups based on this.
- As the extra cortisol from PTSD surges through your bloodstream, **it dulls your body's defences and can also potentially turn things like previously acceptable soaps and creams into irritants triggering skin issues** like eczema flare-ups or other sensitivities and allergies.



# Digestive problems and IBS

- PTSD can trigger the release of corticotropin-releasing factor (CRF) which can have a massive affect on your intestinal function – your fear system believes, if you remove any excess weight from your system, it will allow you to flee any dangerous situation quicker – hence many animals (and humans) will need to poo if they are scared.
- Over long periods **it can cause havoc to your digestive system** – even causing IBS in some people.
- In addition to this, cortisol can be responsible for **bloating, gas, indigestion, heartburn, acid reflux** and other irritable bowel problems.
- Excess cortisol erodes the lining of your digestive tract via inflammation, and increased cortisol also inhibits your stomach from digesting foods properly.

