

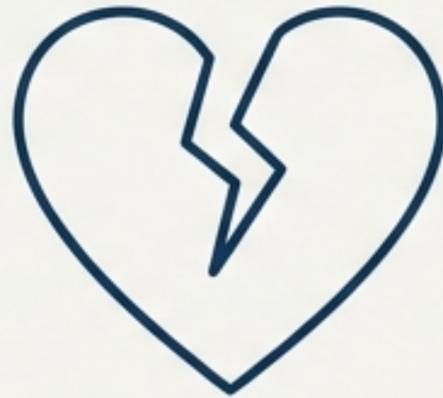
**Beyond the
Diagnosis:
The Physiology of
Autistic Burnout**

A Crisis of Wellbeing



**Up to
84%**

of autistic individuals
experience anxiety.



**3 to 4
times**

more common is
depression.



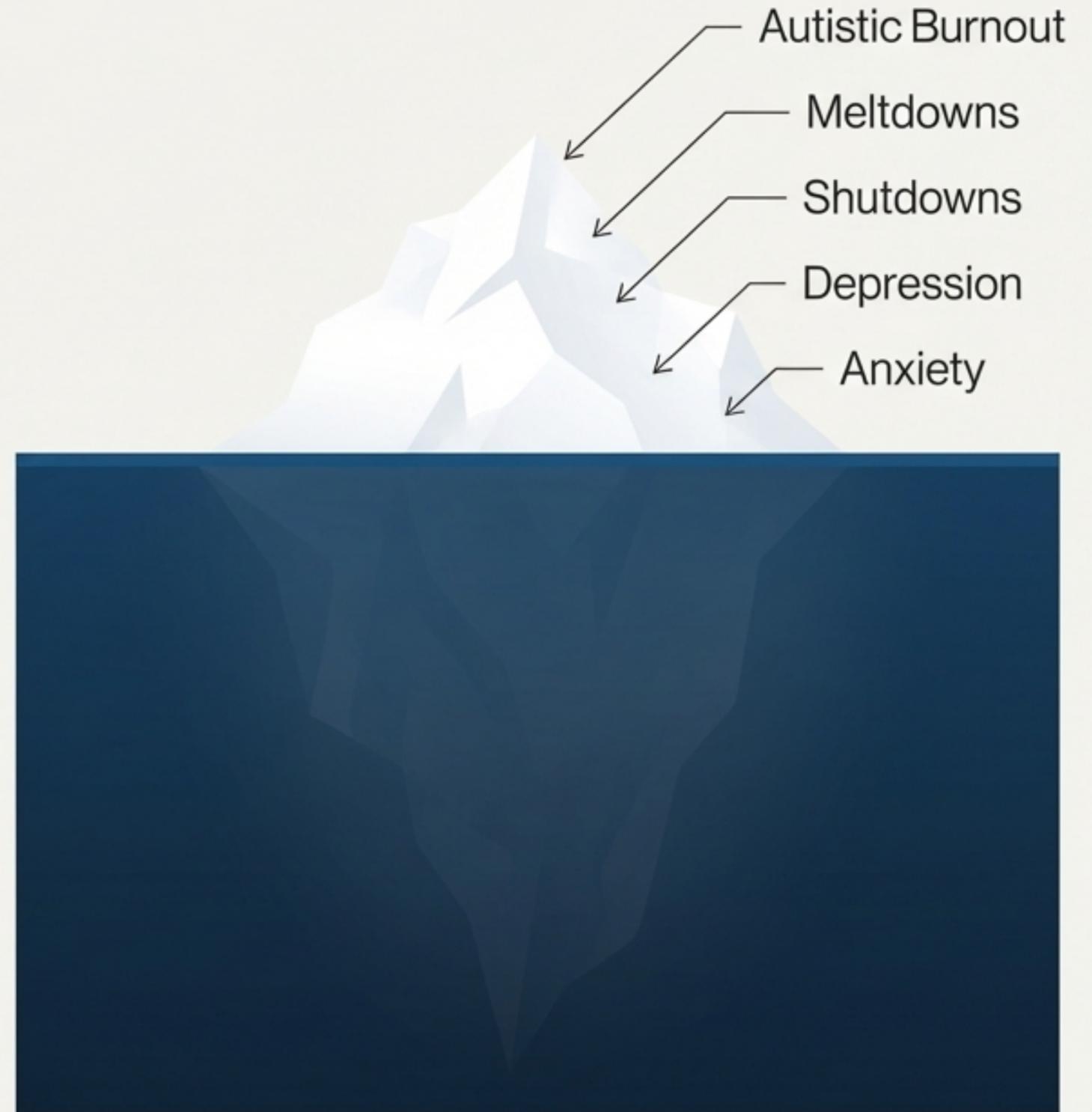
**Twice
as high**

is the rate of suicidality
compared to the general
population.

Autistic Burnout is a State of Physiological Incapacitation

A state of physiological and psychological incapacitation, exhaustion, and distress in every area of life, resulting from a chronic mismatch between demands and capacity.

- Loss of function
- Reduced tolerance to stimulus
- Increased manifestation of autistic traits

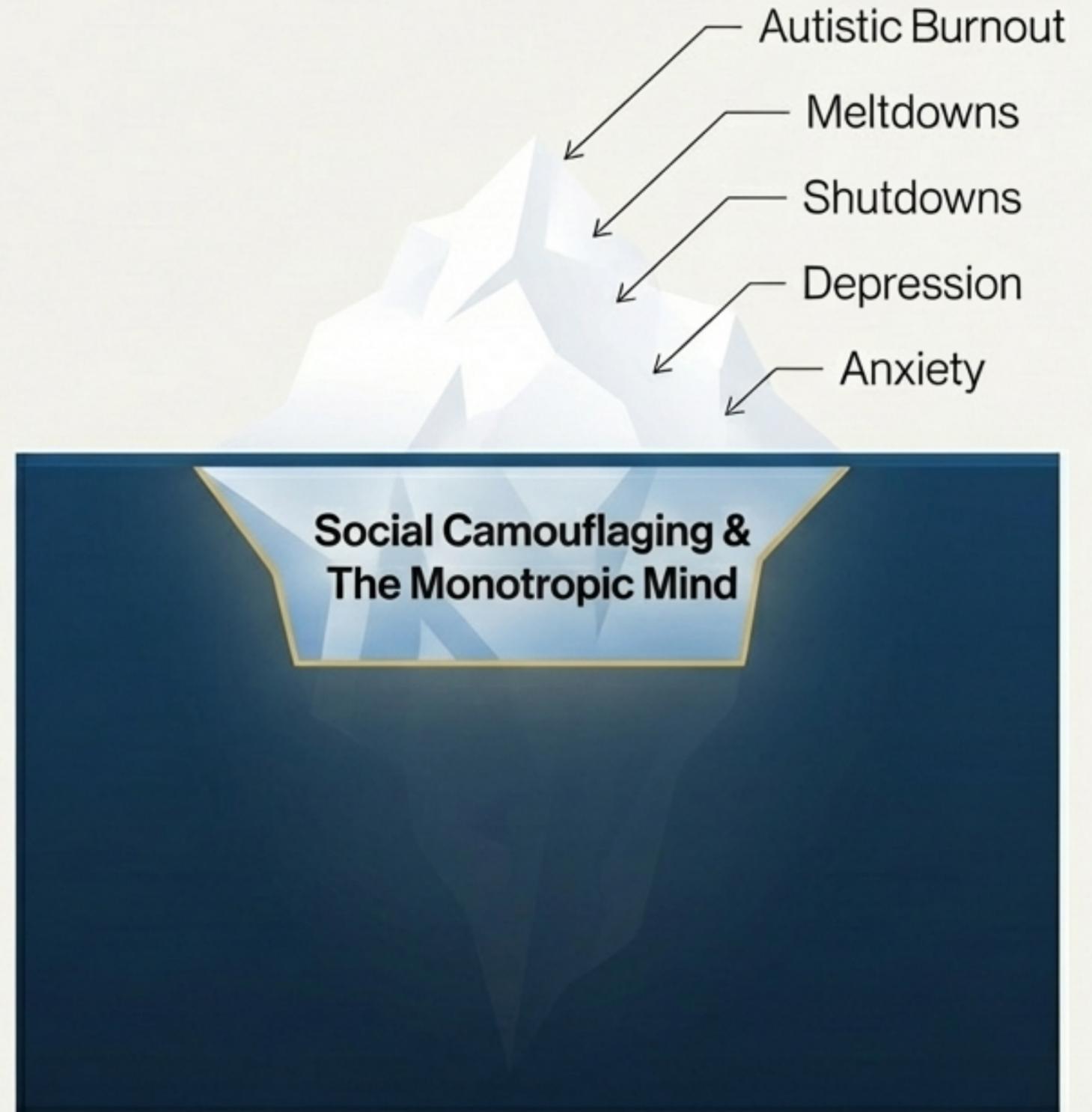


The Invisible Effort of Navigating a Neurotypical World

Introduction of **Social Camouflaging** as a primary driver of chronic stress.

- **Masking:** Consciously suppressing autistic traits.
- **Compensation:** Deliberately adopting new social behaviors.
- **Assimilation:** Implementing strategies to manage internal discomfort invisibly.

“...having all of your internal resources exhausted beyond measure.”

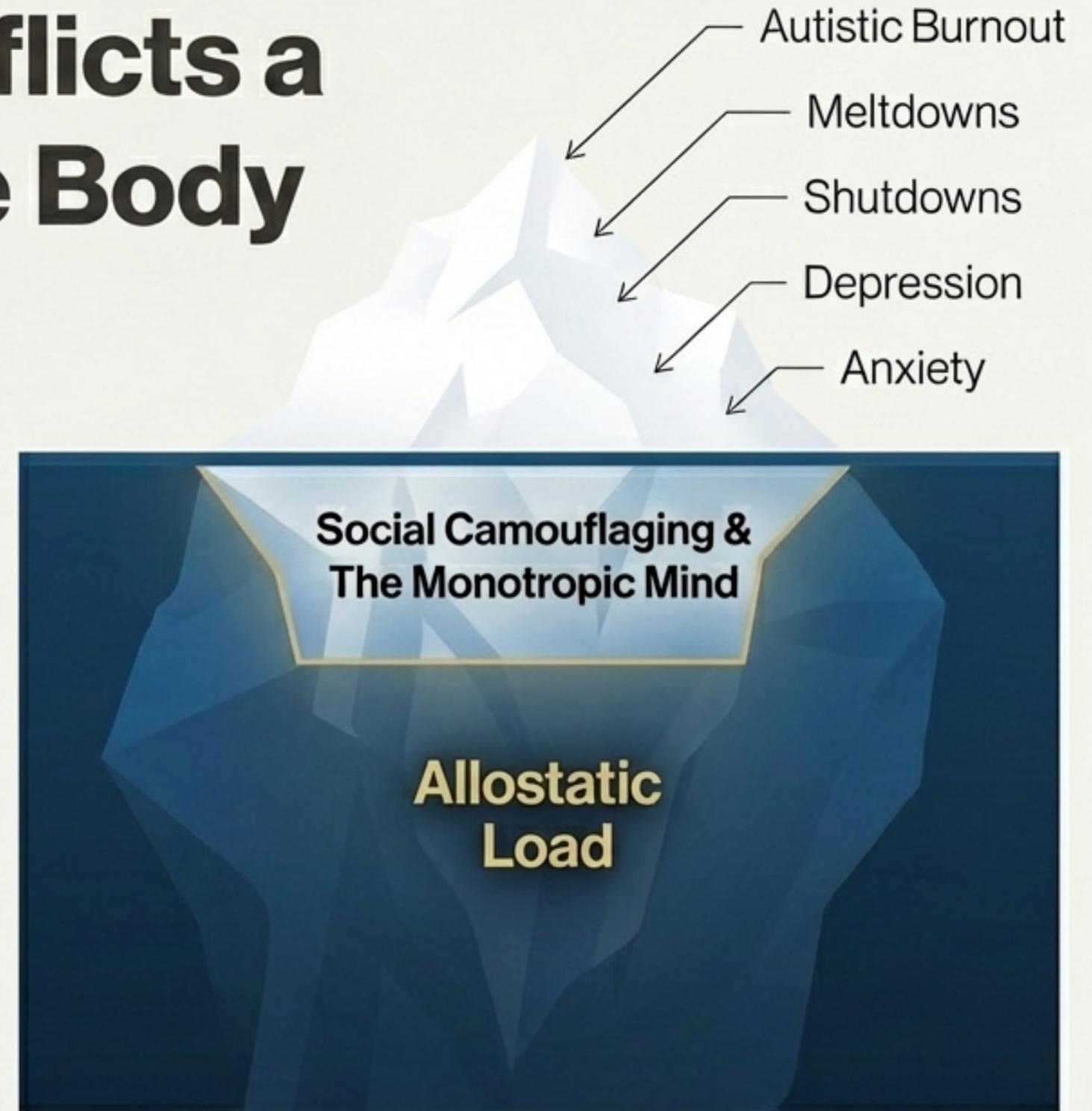
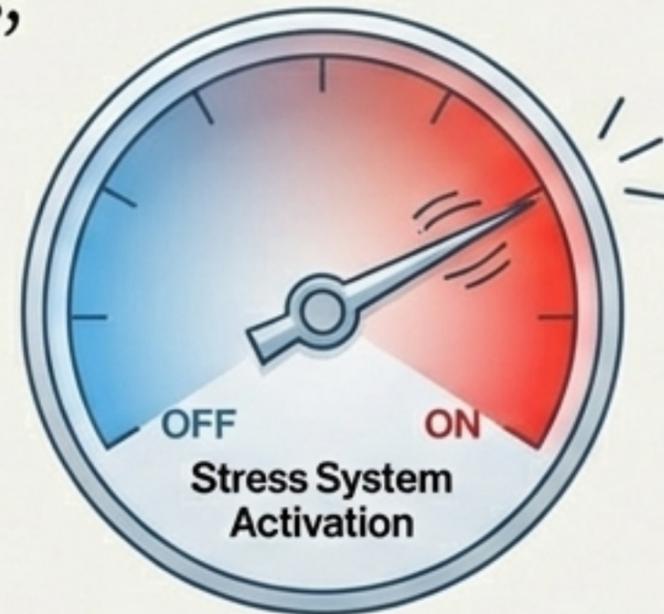


This Chronic Stress Inflicts a Measurable Toll on the Body

Allostatic Load

The “wear and tear on the body” which accumulates as an individual is exposed to repeated or chronic stress.

The body’s stress systems, like the Hypothalamic-Pituitary-Adrenal (HPA) axis, become persistently activated, leading to systemic dysregulation.

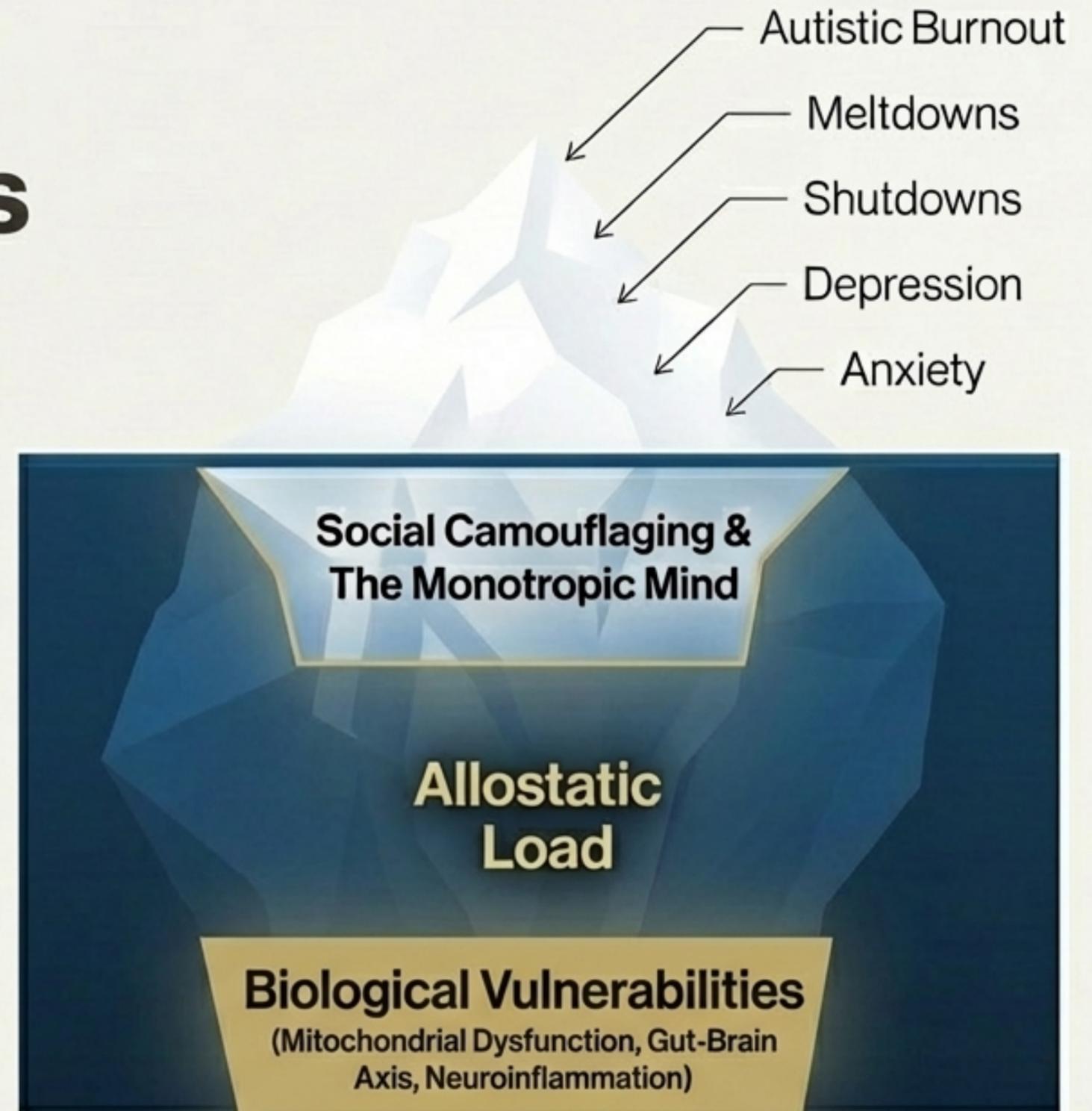


A Deeper Vulnerability Can Amplify the Body's Wear and Tear

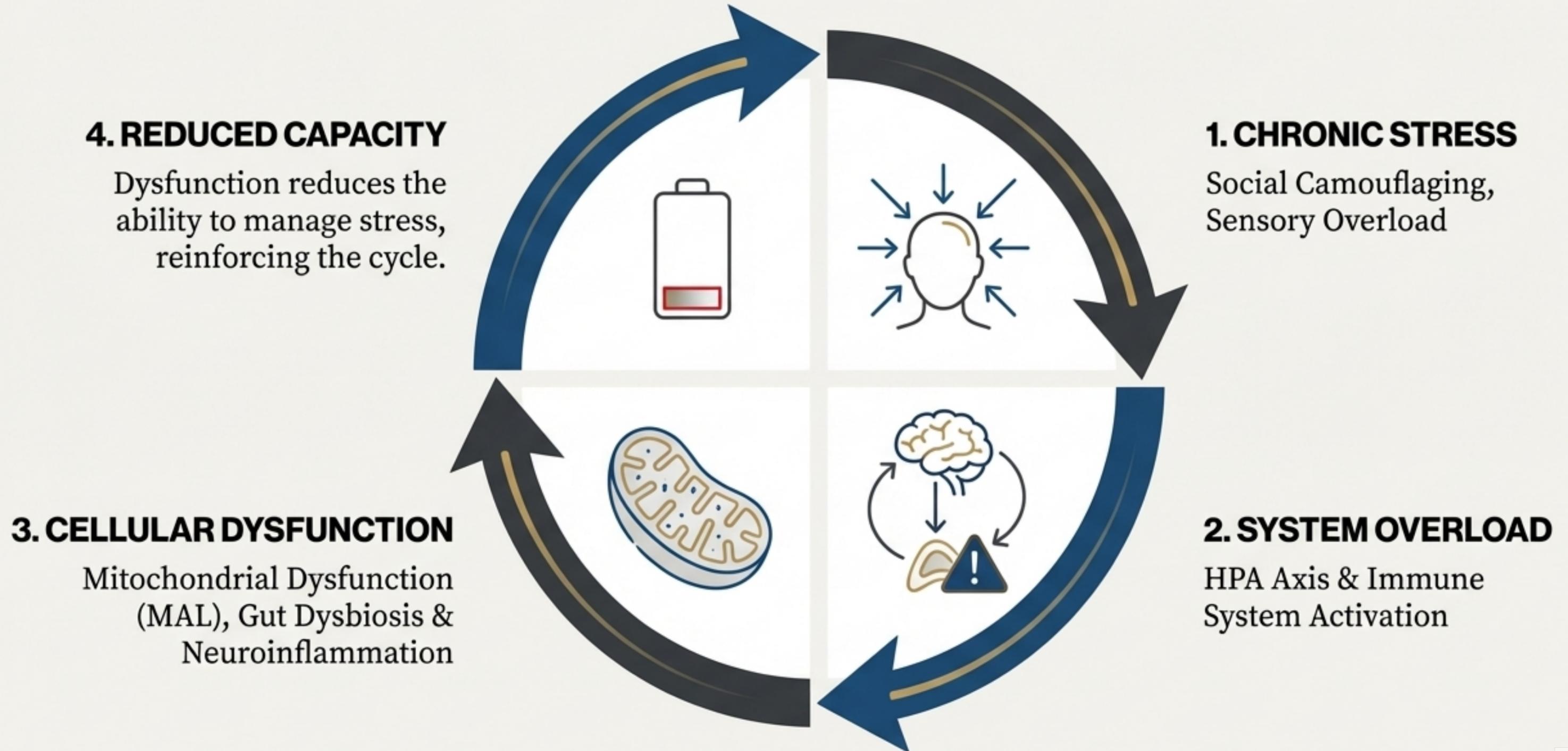
Central hypothesis is

Mitochondrial Allostatic Load (MAL)

1. Mitochondria are the “power plants” of our cells, central to managing the stress response.
2. An underlying mitochondrial sensitivity in many autistic individuals means the “wear and tear” from allostatic load happens faster or has a greater impact.
3. This is a biological signature consistently observed in idiopathic Autism Spectrum Conditions.



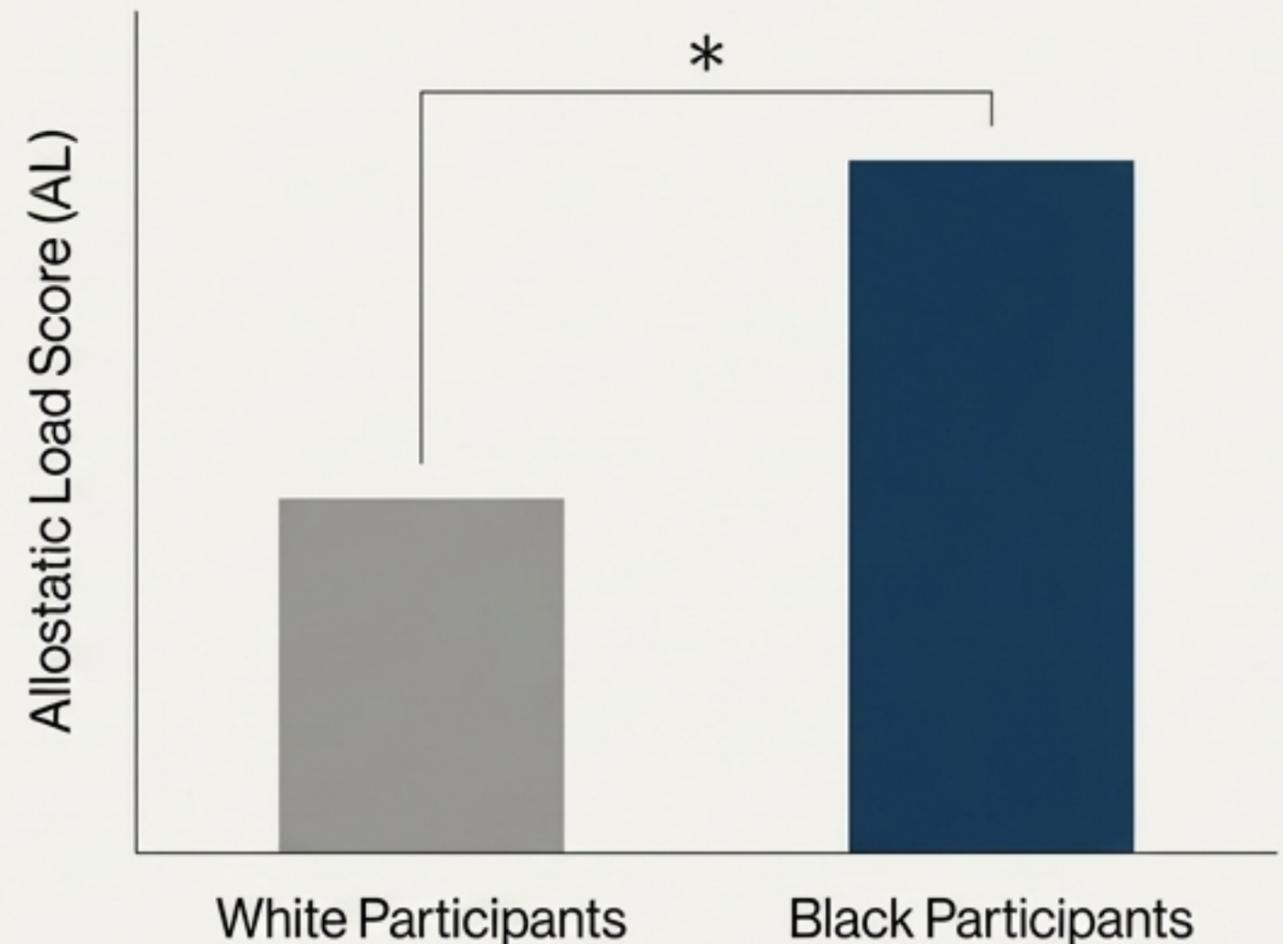
The Result is a Vicious Cycle of Depleting Capacity



We Can Objectively Measure This Cumulative Burden

- A single serum sample can be used to calculate an objective Allostatic Load score.
- Key Finding: Our results highlight racial disparities in stress loads, in which Black participants had greater secondary mediator scores, and higher AL compared to White participants.
- This reinforces the “weathering hypothesis,” hypothesis,” where chronic exposure to social stressors like discrimination leads to measurable, early health deterioration.

Allostatic Load Scores Show Significant Racial Disparities



**The Goal is Not to
“Fix” Autism. The
Goal is to Reduce
Allostatic Load.**

A New Toolkit for Support



At the Surface (Environment)

Reduce sensory input, create predictable spaces, use visual schedules.



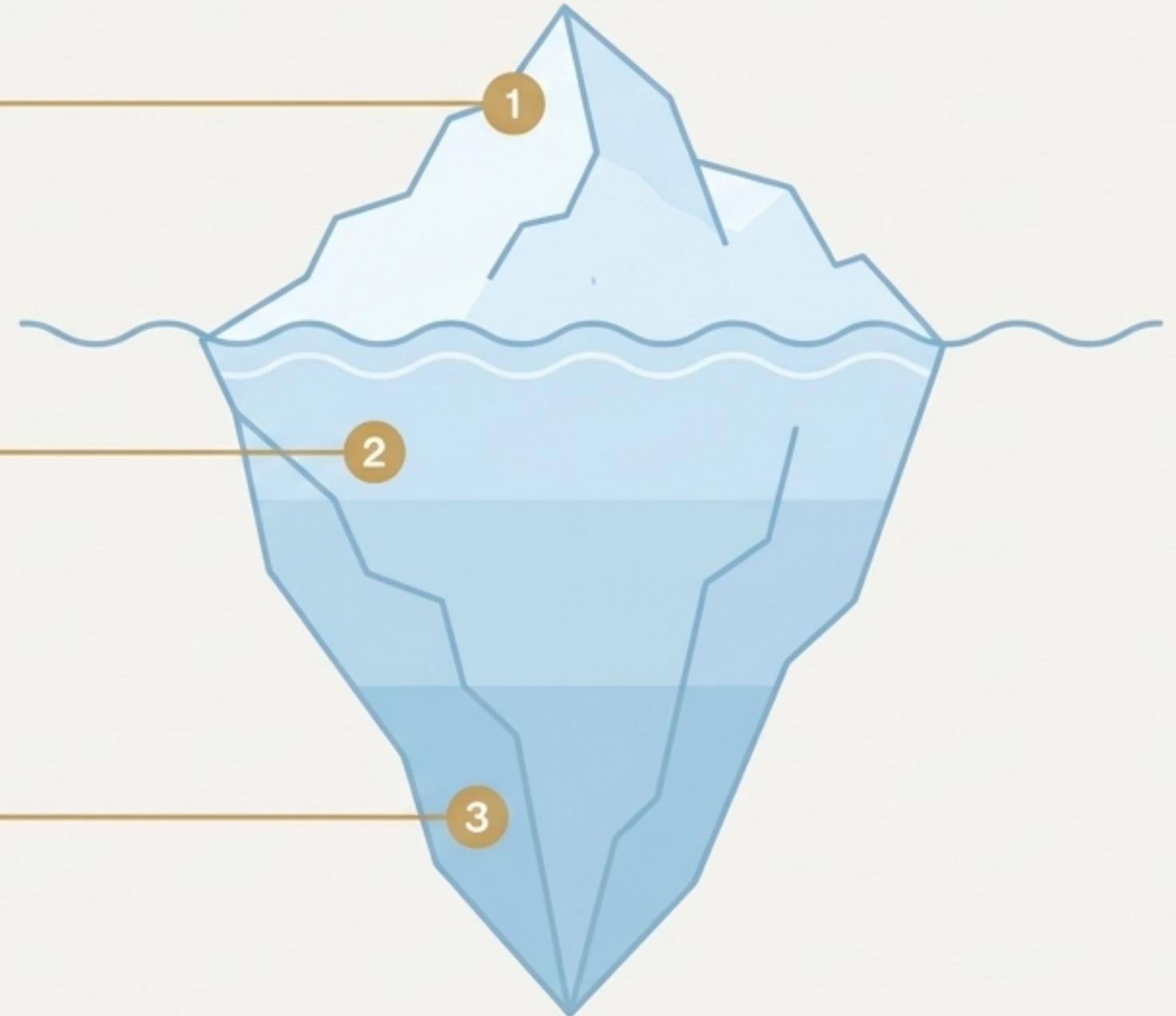
Just Below (Support)

Promote acceptance, use clear communication, and set flexible expectations to reduce the need for camouflaging.

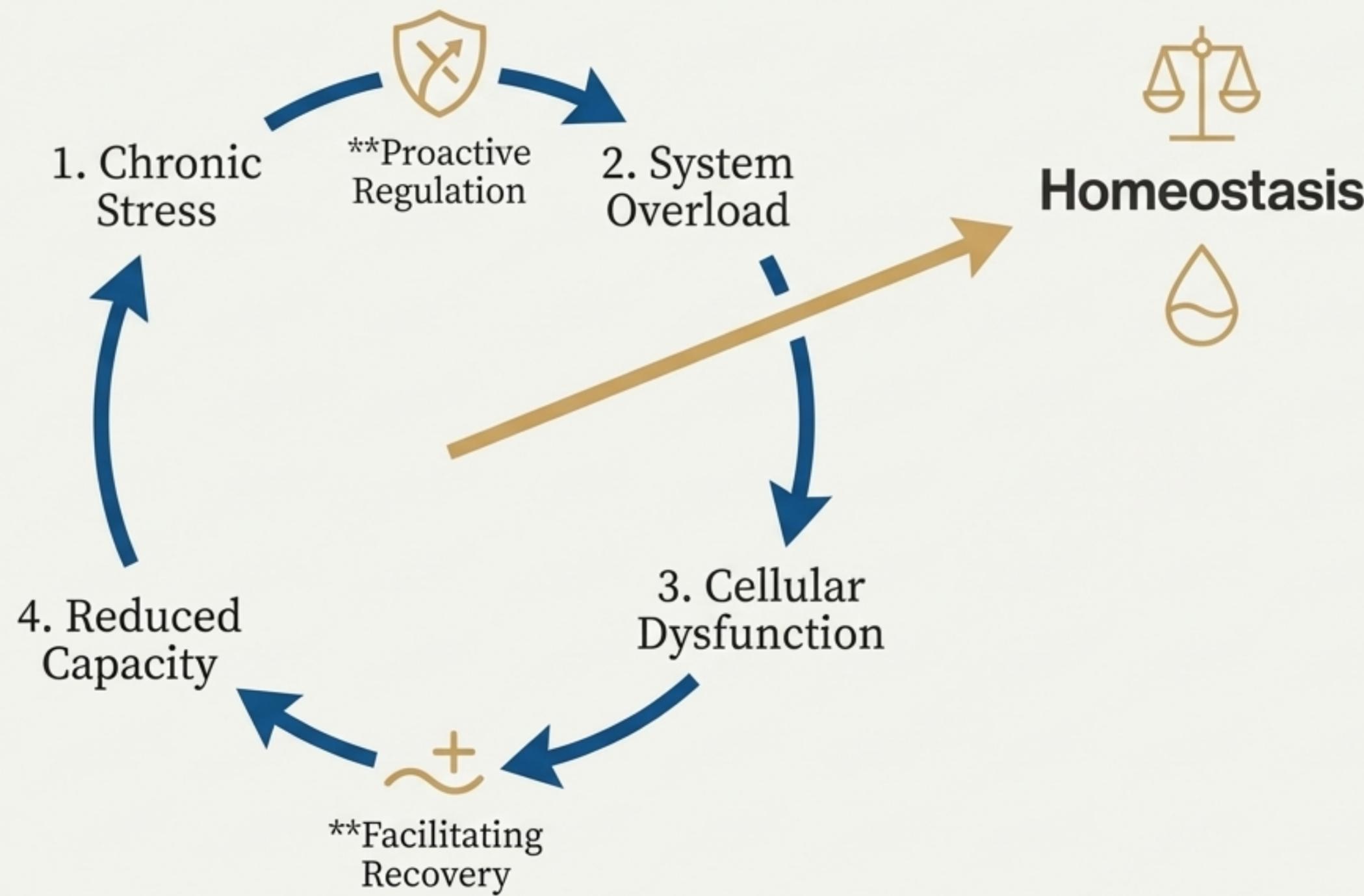


At the Foundation (Biology)

Explore emerging biological support, such as probiotics for the gut-brain axis or therapies targeting mitochondrial function.



Interrupting the Allostatic Load Cycle





The Path Forward: From a Behavioral Model to a Biopsychosocial Model

The mission: **To build environments that fit the individual, rather than forcing the individual to break themselves fitting into the environment.**

The outcome: **Empowerment, resilience, and a better quality of life.**