Regulation of blood pressure

**Stimulus = BP is too low:**

**Sensor = aortic arch & carotid artery baroreceptors**

Integrating center = **medulla**, which stimulates a **sympathetic** response.

**Heart response is:**

↑ heart rate

both of which ↑ blood pressure

**Systemic arteriole response is:**

vasoconstrict

**Sensor = juxtaglomerular apparatus of kidneys**

JGA secretes **renin**

The organ that responds to this is: **Liver**

angiotensinogen converted to angiotensin 1

The organ that responds to this is: **Lungs** (have ACE)

angiotensin 1 converted to angiotensin 2

(can cause vasoconstriction)

The organ that responds to this is: **adrenal gland**

secretes aldosterone

↑ salt reabsorption

↑ water reabsorption

↓ urine output

↑ blood volume

↑ blood pressure