

Pick Or Skip? Manatees Take A Sip

Behavioural responses to different tastes in Greater Caribbean manatees (*Trichechus manatus manatus*)

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INTRODUCTION

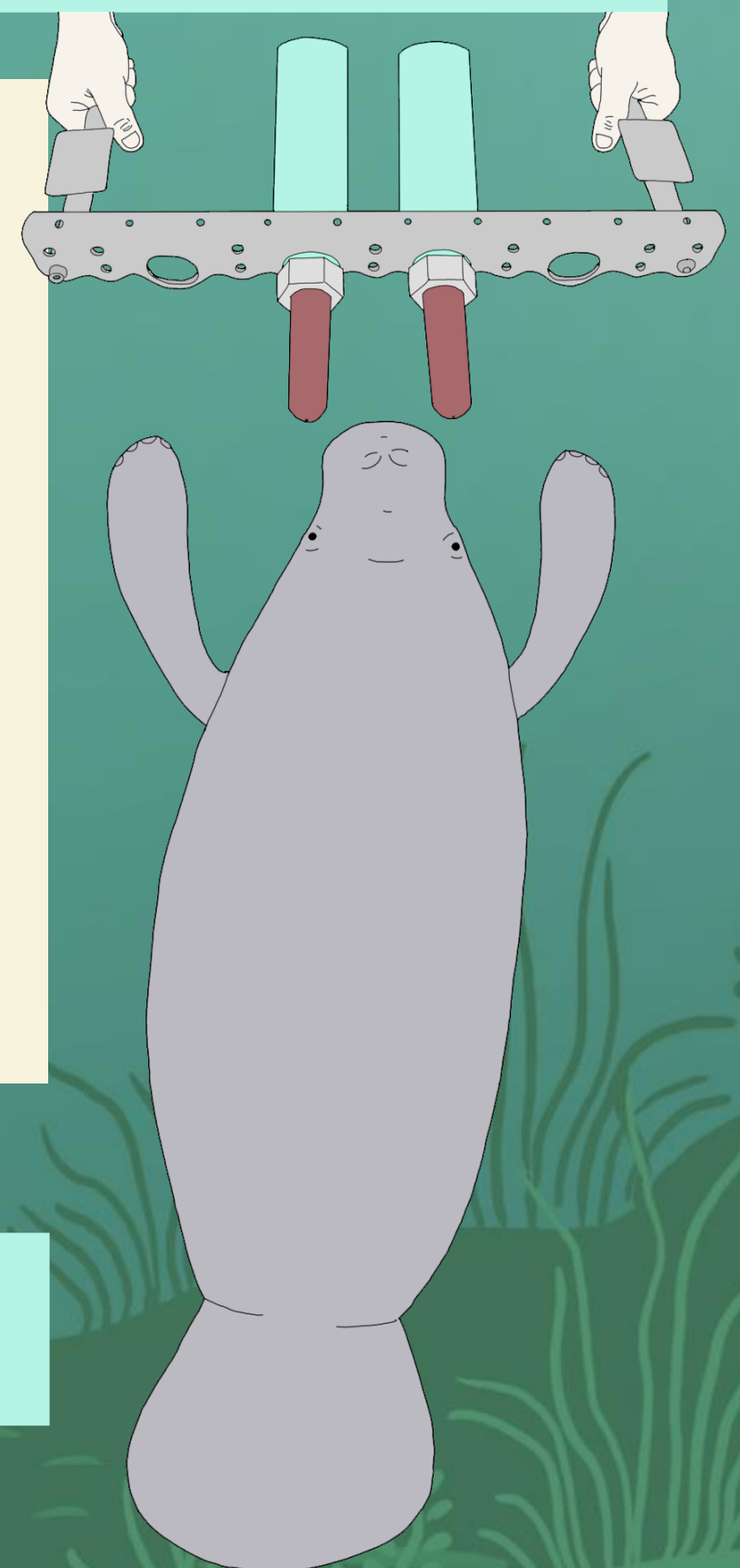
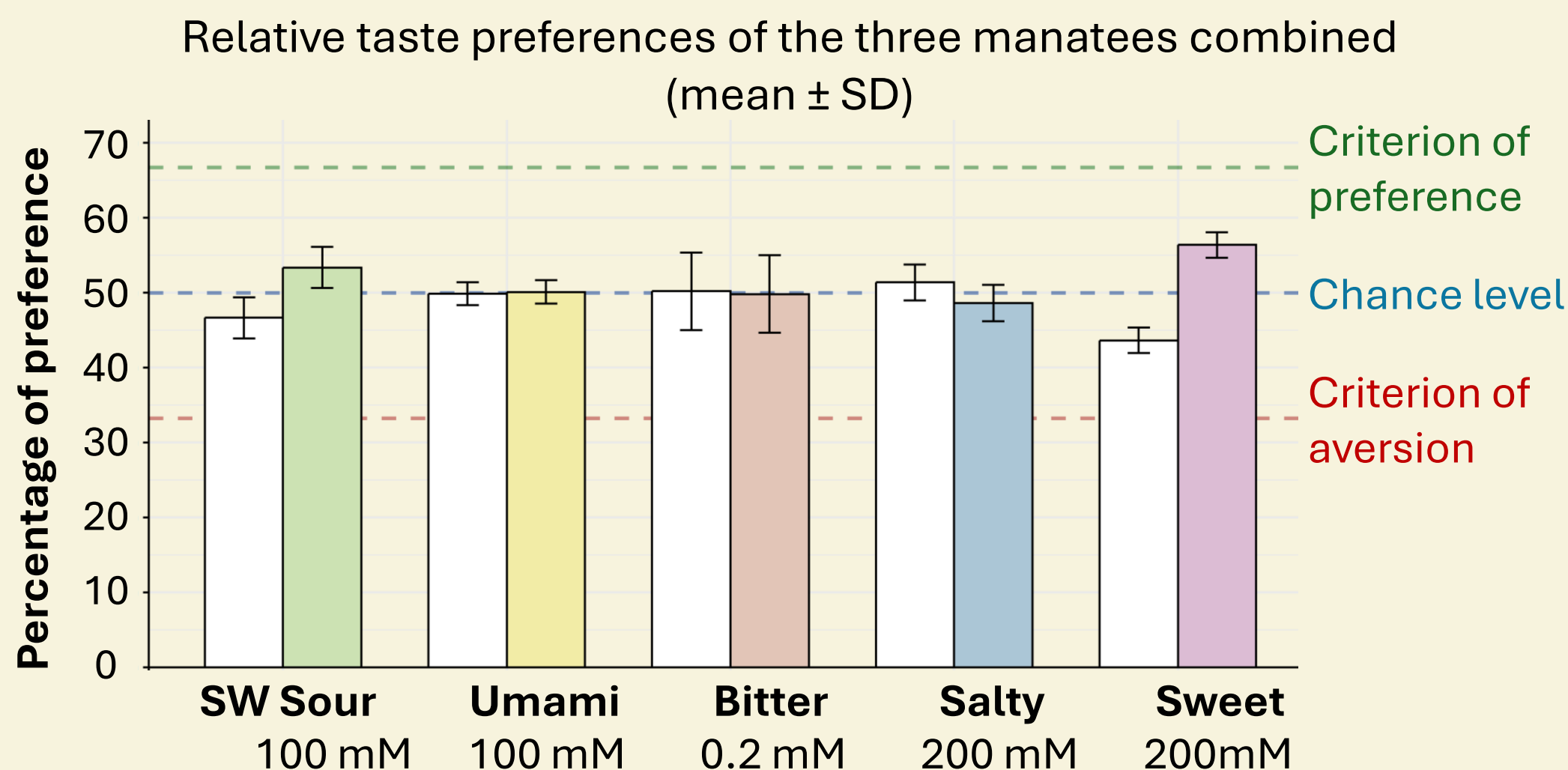
It is currently not known if manatees have a **functional sense of taste**:

- They have a high number of taste buds in their mouths.
- As herbivores, taste may help them to assess the safety, palatability and nutritional value of food.

Aims: Assess if manatees are able to perceive the five basic taste qualities and identify for which of these taste qualities manatees may display a preference or avoidance.

METHODS

- 3 adult male manatees
- Substances used: sucrose (**sweet**), sodium chloride (**salty**), monosodium glutamate (**umami**), citric acid (**sour**), and quinine hydrochloride (**bitter**)
- Solvent and control: seawater (SW)
- **Two-bottle preference tests** of short duration (2 min)



RESULTS

The manatees **did not** demonstrate any significant **preference** for or significant **avoidance** of any of the taste stimuli used.

DISCUSSION

- The herbivorous **dietary specialisation** of manatees may not have prevented the **pseudogenisation of their taste receptor genes**.
- The functionality of taste receptor genes in manatees remains largely **unexplored** and warrants further investigation.



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