

9.20

Class #6-7: Input and output sides of innate behavior. Motivation.

Study questions: Input and output sides of innate behavior.

See questions 6- 10 on previous list.

Study questions: Motivation, pp 42-47

1. Define the term “homeostasis.” Give examples of automatic physiological mechanisms and behavior involved in maintaining homeostasis of a specific parameter.
2. When an animal feels thirst, what does it do if there is no water nearby? Answering this question will give you an understanding of the difference between appetitive and consummatory behavior.
3. What changes in the brain cause thirst motivation?
4. Hunger intensity can be estimated behaviorally by the duration of food deprivation. The text mentions another possible measure, in terms of levels of certain hormones. From the text description, could these levels be an adequate explanation of hunger? Why or why not?
5. Give examples of non-homeostatic motivations. Name several. (These motivational states underlie cyclic and episodic behavioral patterns.)

Study questions: Biological rhythms, pp 47-56.

6. Define “circadian rhythm”, “infradian rhythm”, and “ultradian rhythm”. Give an example of each.
7. What is the role of endogenous and exogenous signals in control of the activity rhythm of a mammal, e.g., a mouse, hamster or human?
8. What is a “free running rhythm”?
9. Describe the location of the “biological clock” in mammals (discovered in rat, hamster and mouse).

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