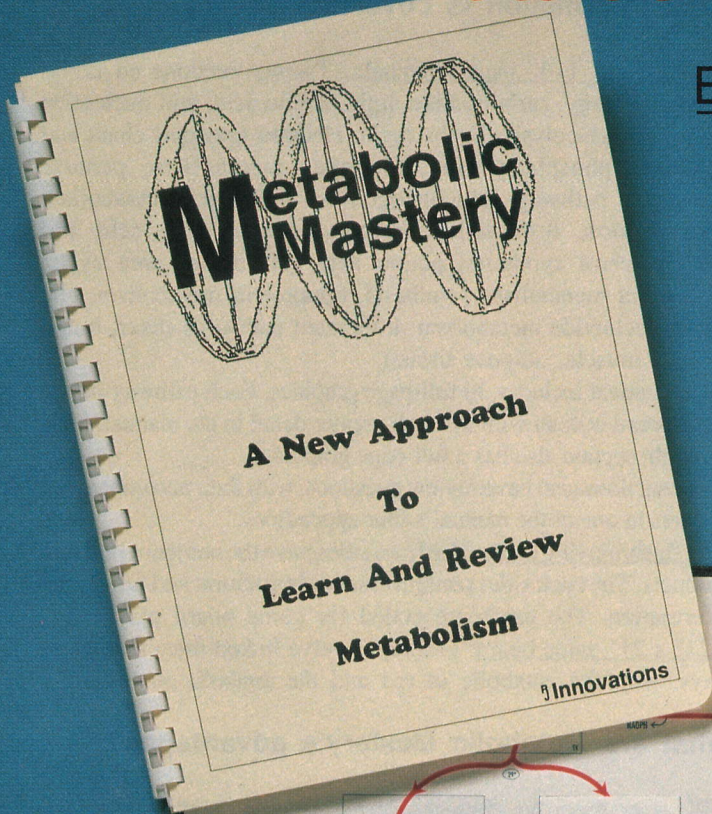


Metabolic Mastery



Each boxed set contains the following:

8.5" x 11" 110 page manual

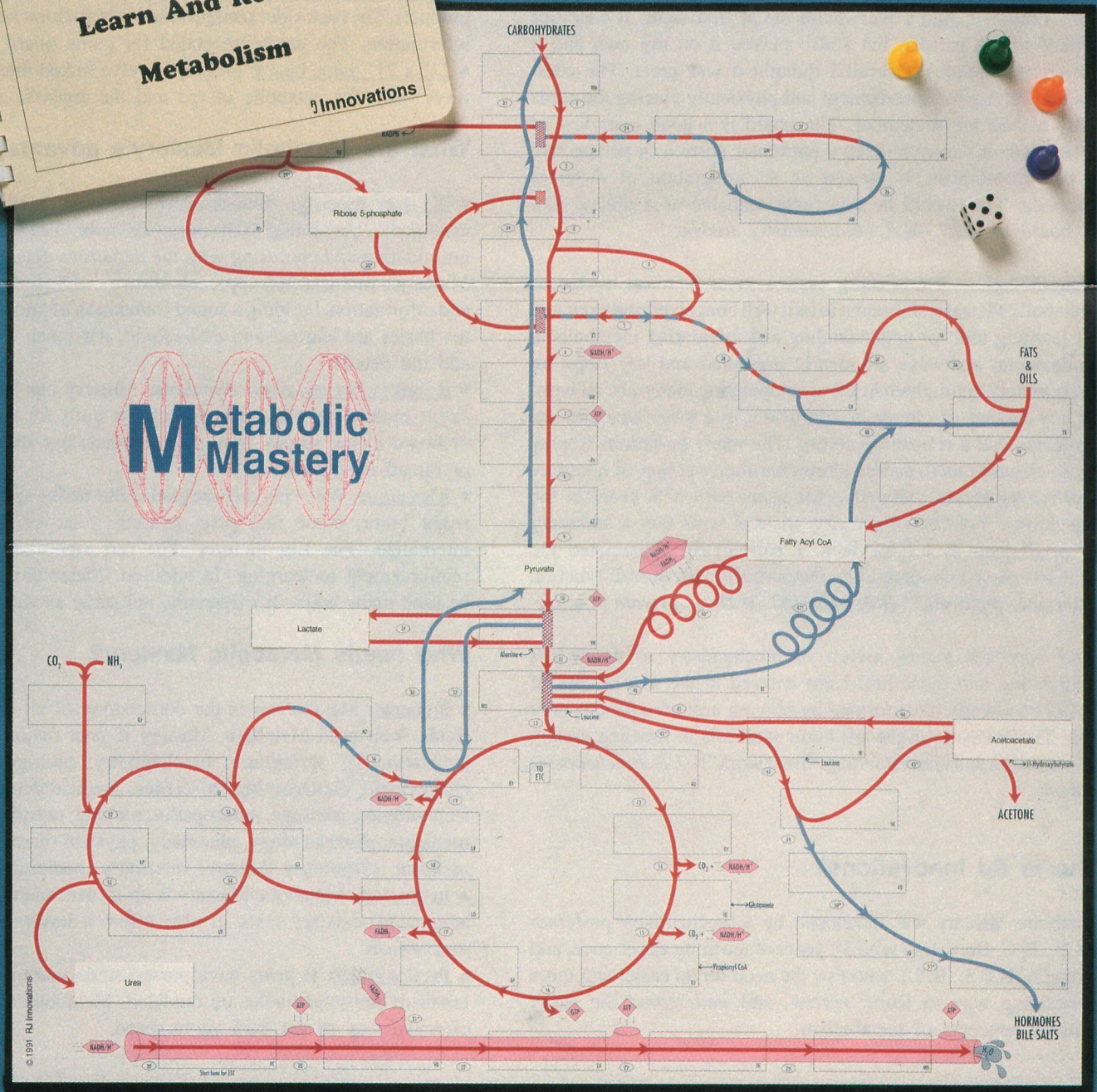
51 playing (or flash) cards

21" x 21" game board

4 pawns & 1 die

[A] Major aldohexose. Blood sugar.
 [B] Building block of starch & glycogen.
 From CHO digestion. End product of gluconeogenesis. NM

(enlarged reverse side)



α-Ketoglutarate

Phosphoenolpyruvate

Malate

Acetyl CoA
 Xylose 5-phosphate
 Arginine
 Glycerol 3-phosphate

Cholesterol

Metabolic Mastery Reviews:

"You've done an incredible job in making a topic that can be boring, dry and dull into an exciting adventure that stimulates those competitive inner parts of our psyche. The balance of competitiveness with learning is, to me, a dynamite one-two punch." —*Jeffrey S. Bland, Ph.D., president, HealthComm, inc. Former professor of biochemistry, University of Puget Sound.*

"We intend to recommend it to our medical students as an alternative method to learn and integrate metabolic pathways. The book is an excellent overview, with an orientation towards mammalian metabolism. Thank you again for introducing me to what I am sure will be a useful supplement to our teaching efforts." —*David R. Morris, Ph.D., professor of biochemistry, University of Washington School of Medicine.*

"I was very impressed. I appreciate that the overall presentation looks simple—it didn't overwhelm me at first sight. It was nice to play with a partner, but I also played it on my own and it was equally helpful. Overall I thought it was great. The combination of visual reinforcement and physically placing the cards really helped me remember. The board is a good overview of metabolism—it's easy to keep a particular portion in perspective so that metabolism is viewed as an integration of different processes. This would be especially valuable as a review tool for board exams." —*K.E., biochemistry student.*

"Congratulations for creating such a great learning device as 'Metabolic Mastery.' I found it to be a well conceived and executed self-learning tool for understanding and integrating metabolism. Fundamental pathways are clearly presented and key steps are appropriately highlighted in the accompanying materials, all without any feeling of clutter or confusion. The directions and explanations had a refreshing clarity. The many variations in play are an elegant touch, as this allows for the selection of a variety of difficulty levels, and makes the game enjoyable even for the solo player. Your accompanying manual is as tidy a summary of metabolism as I have seen. I particularly appreciated the emphasis placed on integrating metabolism with overall function within the organism." —*Miles Hassell, M.D., in private practice.*

"This approach makes review of biochemistry so much less intimidating and more fun. I am amazed at the new access of memory I already have formed by playing around with this only a bit. The hands-on, right-left brain synthesis in learning greatly aids retention and understanding. Great work!" —*J.T., biochemistry student.*

Who is RJ Innovations?

Metabolic Mastery was developed by a biochemistry professor (Ph.D., U.C. Berkeley) with 18 years of teaching experience, and a student (B.P.S., B.S.), who saw the need for an easier and more entertaining way to learn, review, and *understand* the many complex concepts of metabolism.

What information is covered?

- 8.5" x 11" 110 page manual: Twenty sections covering: enzyme, energy, carbohydrate, lipid, amino acid, and nucleotide highlights; glycolysis; Krebs cycle; electron transport chain and oxidative phosphorylation; glycogen metabolism; pentose phosphate pathway; gluconeogenesis; fatty acid catabolism (mobilization, β -oxidation, ketone bodies); fatty acid and triacylglycerol synthesis; amino acid catabolism; urea cycle; cholesterol metabolism (synthesis, lipoprotein metabolism, bile salts); nucleotide metabolism; integrated pathways (liver, brain, skeletal muscle, adipose tissue).

The manual includes 30 full-page graphics. Each pathway on the game board is dealt with in much greater detail in the manual. Each highlight section also has a full-page graphic.

The sections also have review questions, with their accompanying answers in one of the manual's four appendices.

- 51 flash/playing cards: The front sides have the names of reaction products. The back sides contain essential structural and functional information. The cards are coded for game board play.

- 21" x 21" game board: Displays twelve linked metabolic pathways, with the catabolic in red and the anabolic in blue.

What are Metabolic Mastery's advantages?

- It's user friendly: Biochemistry textbooks have become encyclopedic, containing 1000 pages or more. These texts can be intimidating and confusing with the numerous details. Metabolic Mastery's multifaceted approach allows the student to gradually add information, building a sound foundation of knowledge. After the basics are learned and *understood*, it's much easier to then add the details.

- It makes review easy: Metabolic Mastery can be used by a single individual or in small groups. To study for the unit, final, or board exam, simply play a few games, use the flash cards, or reread the manual.

- It's unique: When playing the game, alternative spatial concepts (right brain) come into play, making it easier to grasp and internalize 'The Big Picture.' The fun aspect offers positive reinforcement to learning. In addition, Metabolic Mastery can be used many ways. It's dynamic, not static as with a textbook.

Who needs Metabolic Mastery?

- Students: Metabolism is the cornerstone of all health-related fields. You need Metabolic Mastery if your major/area of specialization is: agriculture, biochemistry, biology, chemistry, chiropractic, dietetics, health science, medical/dental/laboratory technologies, massage, naturopathy, nursing, nutrition, dentistry, medicine, pharmacology, pharmacy, physical therapy, physician assistant, respiratory therapy, veterinary medicine.

- Instructors: Metabolic Mastery is up-to-date and offers a useful adjunct to standard texts. It also offers a novel way to teach metabolism.

- Professionals: If years have passed since you've studied metabolism and your books are outdated, Metabolic Mastery is an effective way to get back up-to-speed.