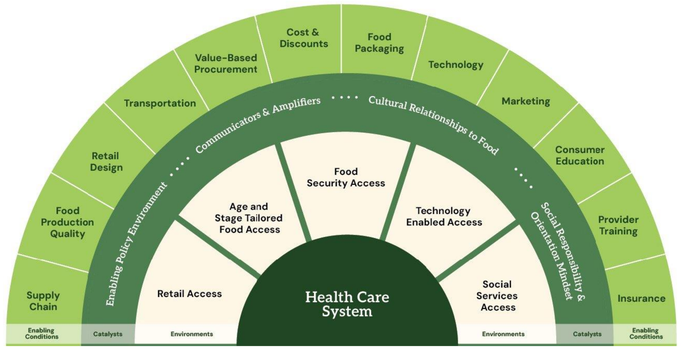
Food = Medicine and the FARM to FAPM Initiative

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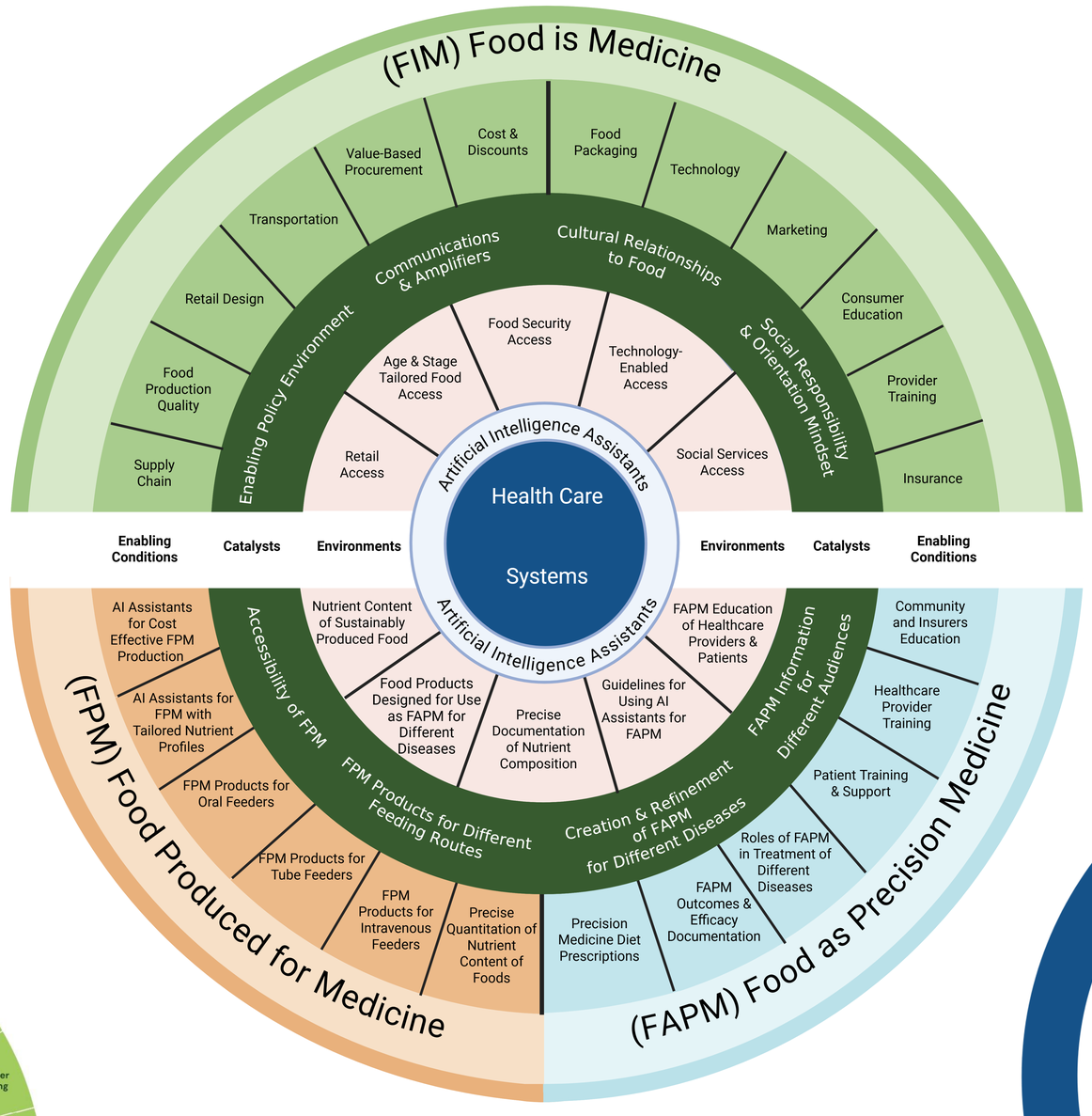
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Abstract

For centuries, various cultures have regarded food as medicine. **FARM to FAPM Initiative stands for Florida's Agriculture, Research, and Medicine leading to the goal of using Food as Precision Medicine.** This initiative aims to bridge agriculture and medicine by integrating food production with precision nutrition and medical treatment. FARM to FAPM builds on the Food is Medicine Ecosystem from the Department of Health and Human Services, expanding it to a full circle of Food = Medicine including food production, processing, prescribing, and consumption supported by Artificial Intelligence tools. While many agree on the importance of Food as Precision Medicine, actual implementation is hindered by unclear responsibilities and lack of integration into daily workflows. The interconnected roles of **Producers, Patients/Persons, Professionals, and Possibilities (issues previously not addressable)** are required for successful implementation of FAPM. Each of the 4Ps needs Artificial Intelligence and automation to reduce labor-intensive tasks and enable wider clinical adoption. The University of Florida's thirty-year collaborative initiative between the College of Agriculture/Institute of Food and Agricultural Sciences and the College of Medicine, culminating in the Precision Ketogenic Therapy Program, exemplifies FARM to FAPM's potential to integrate the concept of Food as Precision Medicine for the benefit of Florida residents.



Food Is Medicine (FIM) ecosystem was depicted as a half-circle framework by the **U.S. Department of Health and Human Services in 2024** (1). In 2025, a University of Florida–led publication in *PNAS*, spearheaded by **Dr. Andrew Hanson**, highlighted the essential role of agricultural producers in enabling Food Is Medicine (2). Building on this momentum, **Dr. Scott Angle** emphasized in a January 2026 blog that Florida is uniquely positioned to lead national FIM efforts, noting UF's engagement at the federal level through **Interim President Don Landry** (3).



FARM to FAPM leverages **Florida's** strengths in **Agriculture, Research, and Medicine (FARM)** to complete the **Food = Medicine** framework. It expands FIM by incorporating **Food Produced for Medicine (FPM)** and **Food As Precision Medicine (FAPM)**, ensuring access to foods with optimal nutrient composition not only for community nutrition but also as a **prescribed component of precision medical care**. By integrating expertise across the University of Florida, this approach enables delivery of the right nutrients, in the right amounts, across the lifespan—from health maintenance to intensive care.

"Food = Medicine" is the sum of FIM + FPM + FAPM.

References

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4Ps

Producers, Patients/Persons, Professionals, and Possibilities—highlight how artificial intelligence (AI) supports the daily workflow required for a complete Food = Medicine circle. AI tools reduce labor-intensive tasks for people while enabling new possibilities that were previously not feasible. As illustrated below, most users interact with these tools through **no- to low-code** applications on personal devices.

The Precision Ketogenic Therapy (PKT) Program, developed over the past 30 years, exemplifies Food as Precision Medicine (FAPM). Like other precision medicine approaches, FAPM involves multiple, complex, and time-intensive components. Integrating AI into routine workflows has freed clinical time, enabled more personalized patient care and supported broader **clinical adoption of PKT**. Realizing these possibilities requires **high-performance computing** (HiPerGator) and UF's AI expertise. Key possibilities include improved characterization of food composition, constituent macronutrient-based dosing, and enhanced monitoring of clinical outcomes.

Acknowledgment: We thank all our patients over the past 30 years for the multitude of things they have graciously taught us.

