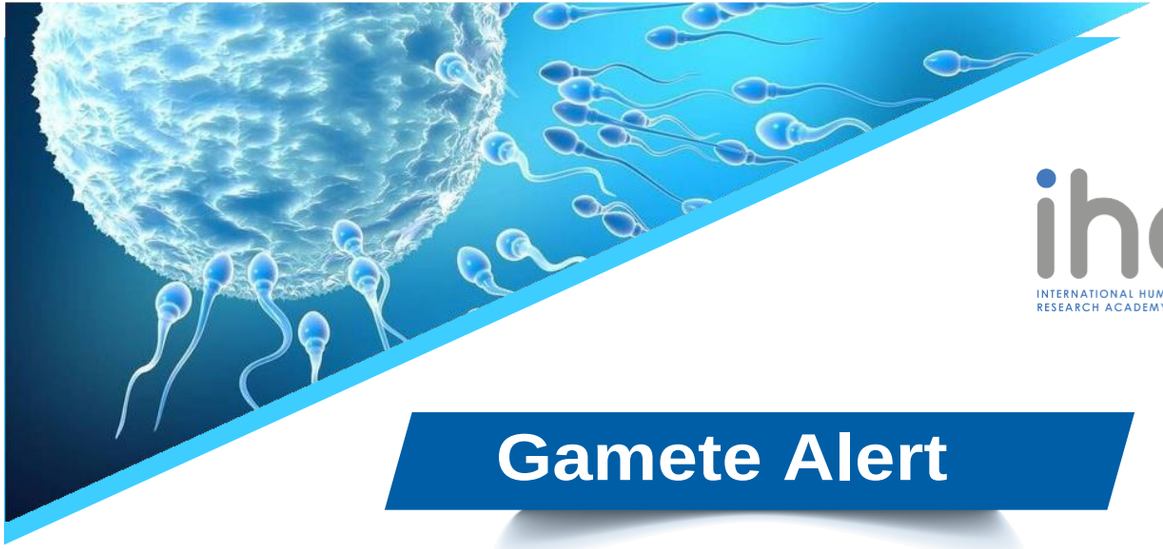

Gamete Alert

Compositional Analysis of commercially available human embryo culture media

Embryo culture media play a crucial role in in vitro fertilization (IVF) success, providing the necessary environment for embryo development. Despite their importance, commercial formulations vary significantly, and manufacturers often do not fully disclose their exact compositions. This study aims to systematically analyze the biochemical composition of widely used embryo culture media, providing insights into their variability and potential impact on embryo development.

The researchers analyzed 47 commercially available embryo culture media and supplements from seven suppliers. The study measured 40 biochemical components including, Electrolytes (e.g., sodium, potassium, calcium),Energy substrates (e.g., glucose, lactate, pyruvate),Amino acids (essential and non-essential)

Proteins (albumin and other supplements), pH and osmolarity levels. The composition of each medium was compared to determine trends and variations across different brands and formulations.

The study highlights the need for better regulation and transparency in the formulation of human embryo culture media.Understanding the exact composition can help improve clinical outcomes in IVF, as small differences in media formulations could significantly impact embryo development and implantation rates. By shedding light on differences in formulation, it calls for standardization and evidence-based selection of culture media in clinical embryology.

The composition of commercially available human embryo culture media

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Link: https://doi.org/10.1093/humrep/deae248

Received: March 15, 2024
Editorial decision: September 25, 2024
Published: November 25, 2024

Gamete alert :01st April ,2025
Compiled by: Yosheeta Tanwar, Nancy Sharma,Dr. Nidhi Singh,