

AAPS Bay Area Discussion Group (BADG)

Developing Palatable Drug Products – It's More than Yuck and Yum

Regulations in the United States and European Union are stimulating research into the development of drug products specifically labeled for pediatric dosing. The development of palatable oral formulations is important to dosing compliance, particularly for children. Many active pharmaceutical ingredients (APIs) are known to be bitter or have other undesirable sensory attributes including smell or trigeminal irritation. In addition, excipients used to increase drug solubility or for preservation, for example, are known to create or exacerbate the taste masking challenge. This presentation will provide an overview of the tools that are available to enable the development of palatable drug products, whether for children, adults or special needs patients. The topics include:

- Anatomy and physiology of taste and smell
- Sensory analysis methods
- Quantitative taste assessment tools
- Fundamentals of taste masking
- Formulation strategies for optimizing the palatability of drug products
- Palatability testing with children
- Requirements for human taste evaluation of drug products

Case examples will be used to illustrate key principles of taste assessment and optimization of drug products.

Speaker

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David Tisi leads the pharmaceutical taste assessment and taste masking operations at Senopsys LLC. David has spent his career at the intersection of food and pharmaceutical technology and is skilled in the art and science of taste masking with 15 years of experience developing palatable formulations, including investigational and approved drugs across a diverse range of indications and dosage forms. His expertise includes sensory analysis, taste modulation, flavor construction and processing technology. David received an MS in Food Science from Cornell University and worked as a formulator for PepsiCo and Nestle, later joining Senopsys founder Jeff Worthington at Arthur D. Little's successor firm, TIAX applying food science approaches to the unique challenges of pharmaceuticals. David is a member of the American Association of Pharmaceutical Scientists and the Institute of Food Technologists and has several patents issued and pending relating to improving palatability of food and drug products.