AAP Guidelines Regarding Sugar-sweetened Beverages for Children Younger than Five Years of Age

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The American Academy of Pediatrics has several formats for Guidelines and Policy

- Clinical Practice Guidelines
- Policy Statements
- Clinical Reports
- Technical Reports
Clinical Practice Guidelines—Based on a comprehensive literature review and data analyses with formal rules of evidence in support of each recommendation made. Clinical Practice Guidelines (CPGs) consist of:

- The Practice Guideline itself
- TR (evidence basis for the Guideline, including data analyses, evidence tables, and bibliography)
- A Patient Education Brochure (developed with the Department of Marketing and Publications).
I. DEFINE THE PROBLEM
- Select topic

II. COMPARE INTERVENTION
- Define: providers, practice setting, classic case

III. IDENTIFY HEALTH OUTCOMES*
- Patient preferences
- Cost analysis
- Health outcome measures

IV. DEVELOP STRUCTURE OF PROBLEM
- Evidence model
- Decision time
- Algorithm

V. DEFINE SEARCH QUESTIONS
- Critical linkages
- Decision models

VI. CONDUCT LITERATURE REVIEW
- Keywords
- MeSH terms
- Inclusion items

VII. DEVELOPMENT OF LITERATURE REVIEW FORMS

VIII. ABSTRACT THE EVIDENCE FROM THE ARTICLES

IX. DEVELOP EVIDENCE TABLES
- Sensitivity analysis
- Decision analysis

X. COMBINE THE EVIDENCE
- Meta-analysis and clinical subjective judgement

XI. DEVELOP BENEFITS AND HAZARDS BALANCE SHEET

XII. SELECT THE BEST ALTERNATIVE STRATEGY**

XIII. DEVELOP CLINICAL PRACTICE GUIDELINE RECOMMENDATION

XIV. DISSEMINATE AND IMPLEMENT CLINICAL PRACTICE GUIDELINE

XV. REVISE THE CLINICAL PRACTICE GUIDELINE

* Think backwards. Start by identifying:
1. Health outcomes (length and quality of life; functional disability, death, etc.) that patients experience and care about
2. Interventions
3. Definition of the problem, etc.

**Answer the question:
Is this the best among the interventions, given the evidence, professional/clinical experience, cost. benefits, harms, etc., to achieve the specific health outcomes from the patient's perspective?

Collect baseline data
**POLICY DOCUMENT FORMAT TYPES—POLICY STATEMENT**

- **Characteristics**
  - Drives the organization's activities and/or represents the organization's stance on a particular issue
  - Based on literature review and data analysis
  - Expresses a definite course/method of action in light of given conditions to guide and determine present/future decisions
  - SHOULD include recommendations that guide the child health care system and/or improve the health of all children
  - Should be supported by transparent strength of evidence
**Policy Document Format Types—Policy Statement**

- **Authorship**
  - Document has identified lead authors or is authored by a larger Academy entity (e.g., Council, Committee, Section)

- **Evidence Base**
  - Describes the level of evidence-based data and review on which the policy is based
  - Uses formal rules of evidence in development
POLICY DOCUMENT FORMAT TYPES—CLINICAL REPORT

• Characteristics
  – Drives the pediatrician in the clinical setting/best practices, state-of-the-art medicine
  – Based on literature review and data analysis
  – CAN include clinical recommendations for the clinician in rendering pediatric care, which should be supported by evidence when possible in the body of the report
Policy Document Format Types—Clinical Report

• Authorship
  – Document has identified lead authors or is authored by a larger Academy entity (e.g., council, committee, section)

• Evidence Base
  – Describes the level of evidence-based data and review on which the report is based
  – Uses formal rules of evidence in development
**Policy Document Format Types—Technical Report**

- **Characteristics**
  - Provides background information for a Policy Statement or Clinical Report
  - Based on literature review and data analysis
  - Includes the evidence basis for the policy, methodology, data analyses, evidence tables and other relevant background
  - Includes a current and complete reference list
  - SHOULD NOT include recommendations
POLICY DOCUMENT FORMAT TYPES—TECHNICAL REPORT

• Authorship
  – Document has identified lead authors or is authored by a larger Academy entity (e.g., council, committee, section)

• Evidence Base
  – Describes the level of evidence-based data and review on which the report is based
  – Uses formal rules of evidence in development
POLICY DEVELOPMENT AND REVIEW PROCESS—FLOW CHART

Intent Process

1. Authoring entity discusses potential topic
2. Topic literature review completed
3. Authoring entity determines document be pursued, and there are no other publication options, lead author assigned and required to complete author checklist
4. Author(s) complete COI disclosure
5. Authoring entities review/approve intent.
When approved by standing board committee, 2-year time frame begins

Lead author completes 1st draft (6 months)

Entire authoring entity develops/finalizes document (6 months)

Document sent to all identified internal and external reviewers (1 month)

Reviewer comments considered/ addressed by lead author (2-3 months)

Author(s) complete COI disclosure(s)
**Policy Development Process—Flow Chart**

Executive Review, Approval, and Publication

1. Executive Staff reviews document (1 month)
2. EOC submits document with Executive Staff comments to BOD for review (1 month)
3. Executive Staff and BOD comments shared with lead author and authoring entity for incorporation
4. Upon final approval by Executive Committee, document published in *Pediatrics*
AAP Statements are reviewed at least every 3 years by the Authoring Body

- Reaffirm
- Revise
- Retire

based upon evidence published since the last review
AAP Definition of Sugar-Sweetened Beverages

- The AAP has not adopted a formal definition of sugar-sweetened beverages.
- The AAP Section on Obesity/Committee on Nutrition, in conjunction with the American Heart Association, is in the process of developing a Policy Statement on The Health Effects of Added Sugar.
In a recent Scientific Statement (Vos MB et al. *Circulation* 2017;135:e1017), the American Heart Association defined added sugars as they are defined by the USDA:

“All sugars used as ingredients in processed and prepared foods and beverages and sugar eaten separately or added to foods at the table.”
AAP Diet Guidance

• There is substantial interest within the AAP regarding diet in the first 5 years of life

• There is also substantial concern by the AAP regarding factors in the first 5 years of life that promote obesity development
• **AAP Guidelines to Pediatricians and to Parents** comes in some forms other than the Clinical Practice Guidelines/Policy Statements


AAP—Sugar-sweetened Beverages

- The AAP does not have a specific statement on beverage intake in the 0-5 year age group and does not have a specific statement on sugar-sweetened beverages in this age group.

- However, there is information on these topics from a variety of AAP sources.
AAP—Sugar-sweetened Beverages

- The AAP does have guidance on feeding and nutrition generally for children 0-5 years and this guidance does include information about beverages.
AAP Nutrition Guidance Age 0-5 Years

First year of life

• Exclusive breastfeeding for approximately 6 months, and continued breastfeeding after complementary foods have been introduced for at least the first year of life
• The only acceptable substitute for breast milk when breastfeeding is not possible is infant formula
• No 100% fruit juice. No other drinks.
• Complementary feedings, including cereal and other “baby foods”, can begin at 6 months of age
• Foods rich in iron should be emphasized to avoid iron deficiency and iron deficiency anemia
AAP Nutrition Guidance Age 0-5 Years

Second year of life (12-24 months)

• Breastfeeding can continue as long as mutually desired by mother and child
• Milk can be introduced. If there is a concern about risk of obesity or long term risk of cardiovascular disease, reduced fat milk is acceptable.
• Emphasize intake of fruits and vegetables to establish a life long pattern.
• Whole fruit is preferred, but 100% fruit juice can be given
• Fruit juice should be pasteurized
  – Not from a bottle
  – 4 ounces or less
• Calorie-dense and nutrient-poor foods and beverages should be avoided. (This includes sugar-sweetened beverages)
KEY POINTS FOR COMPLEMENTARY FEEDING

1. Choose foods that provide key nutrient needs and help meet energy needs
   • Iron
   • Zinc
2. Introduce one “single ingredient” new food at a time
3. Introduce a variety of foods
   • By 8 months of age, all food groups
4. Withhold cow’s milk during the first year of life
5. During the second year of life, low-fat milk can be considered
KEY POINTS FOR COMPLEMENTARY FEEDING

1. Limit consumption of fruit juice
   - No fruit juice in the first year

2. Ensure homemade complementary foods are prepared in a safe manner
   - Avoid choking hazards
   - Focus on single-ingredient foods
   - Avoid added sugar and salt

3. Encourage the infant’s involvement in the feeding process

4. Respond to the infant’s hunger cues and satiety cues

5. Monitor growth and development
AAP Nutrition Guidance Age 0-5 Years

Age 2-5
• This age range marks the transition to a more adult type of diet
• Use low-fat milk. This should be the main drink during this time.
• 100% fruit juice is acceptable in appropriate portion size*
  – 4 ounces/day age 1-3
  – 4-6 ounces/day age 4-6
• Work to ensure day care and preschool programs are consistent with AAP guidance
• Develop a diet rich in fruits, vegetables, whole grains, low-fat dairy and lean meats

• During this age range, it is important that the infant’s or child’s growth (height, weight, BMI) and development are tracked longitudinally.
AAP Nutrition Guidance Age 0-5 Years

• There is substantial concern about the presence of fruit flavored drinks and soft drinks consumed by young children

• Sweetened beverages are one of the top 3 contributors to daily energy. 11% of toddlers consume carbonated beverages on a given day

• In children and adolescents (age 2-19), soft drinks may provide as much as 10% of total energy

• Soft drinks are the main source of added sugar in the diet of young children
AAP Nutrition Guidance Age 0-5 Years

- Soft drinks have been shown to replace milk in the diet and are associated with lower intake of key nutrients, such as calcium.
- Soft drinks should not be given to children age 0-5 years.
- Sports and energy drinks are not appropriate for young children.*

AAP NUTRITION GUIDANCE AGE 0-5 YEARS

Other Concerns

• Prevention of obesity
  – Health promotion efforts in pediatric practice should aim at removing all sugar-sweetened beverages from children’s diets (soda, iced tea, sports drinks, fruit drinks, energy drinks)

Daniels SR, Hassink SG. Pediatrics 2015;136:e275
AAP Nutrition Guidance Age 0-5 Years

Other Issues
Flavored milk—is perfect the enemy of good?

• Advocates of removal of flavored milk have suggested that there is no need for sweetened milk as it represents a source of added calories

• Advocates of flavored milk emphasize studies that have shown no association between flavored milk and obesity and that when flavored milk is removed from schools, milk consumption falls by 1/3 and does not rebound with time

• The AAP has supported the use of flavored milk for children as one approach to achieve nutrition goals for vitamin D and calcium
Other issues

• The AAP has not developed recommendations that differ for any subgroup of the population. However, there is broad recognition that cultural preferences regarding diet are very important.

• This means that differences in the operational way recommendations are implemented may be required.
Social Determinants of Nutrition

• The AAP is quite concerned about social factors that impact good nutrition

• One example of this is the Policy Statement on Food Insecurity*

* Schwarzenberg SJ et al. Pediatrics 2016
AAP Nutrition Guidance Age 0-5 Years

Media—Nutrition

The AAP is also concerned about the role of media in promoting poor nutrition

Recommendations: Pediatricians

• Start the conversation early. Ask parents of infants and young children about family media use, their children’s use habits, and media use locations.
• Help families develop a Family Media Use Plan (www.healthychildren.org/MediaUsePlan) with specific guidelines for each child and parent.
• Educate parents about brain development in the early years and the importance of hands-on, unstructured, and social play to build language, cognitive, and social-emotional skills.
• For children younger than 18 months, discourage use of screen media other than video-chatting.
AAP NUTRITION GUIDANCE AGE 0-5 YEARS

Media—Nutrition

Recommendations (continued): Pediatricians

• For parents of children 18 to 24 months, discourage use of screen media other than video-chatting

• For parents of children 18 to 24 months of age who want to introduce digital media, advise that they choose high-quality programming/apps and use them together with children, because this is how toddlers learn best. Letting children use media by themselves should be avoided.

• In children older than 2 years, limit media to 1 hour or less per day of high-quality programming. Recommend shared use between parent and child to promote enhanced learning, greater interaction, and limit setting.

• Recommend no screens during meals and for 1 hour before bedtime.
AAP Nutrition Guidance Age 0-5 Years

Media—Nutrition

Families

• Avoid digital media use (except video-chatting) in children younger than 18 to 24 months

• Turn off television and other devices when not in use

• Keep bedrooms, mealtimes, and parent-child playtimes screen free for children and parents. Parents can set a “do not disturb” option on their phones during these times
AAP NUTRITION GUIDANCE AGE 0-5 YEARS

Media—Nutrition

Industry

• Make high-quality products accessible and affordable to low-income families and in multiple languages.

• Eliminate advertising and unhealthy messages on apps. Children at this age cannot differentiate between advertisements and factual information and, therefore, advertising to them is unethical.

AAP NUTRITION ADVOCACY

• AAP Advocacy is informed by AAP policy. AAP Policy relies on the Expert Committees, including the AAP Executive Committee.
AAP Nutrition Guidance Age 0-5 Years

• The AAP is supportive of efforts to incentivize healthier eating, improve access to fruits and vegetables, and enhance consumer education

• The AAP has not supported efforts to remove 100% juice from WIC packages

• The AAP has not supported efforts to disallow certain foods and beverages (SSBs) from the SNAP program
AAP Nutrition Guidance Age 0-5 Years

Other issues

- The AAP is very much focused on the relationship of public policy to nutrition
- This is demonstrated in support for:
  - WIC
  - SNAP
  - School Meal Program
  - Other policies at the state and federal level

All of which have an important impact on the availability of a nutritious diet for children
AAP Nutrition Guidance Age 0-5 Years

• This focus on policy will be further developed with respect to added sugar in the proposed policy statement:

  “Public Policy to Protect Children from the Health Effects of Added Sugar”
AAP Nutrition Guidance Age 0-5 Years

- The AAP does not have good data on the implementation of AAP Nutrition Policy by pediatricians or by parents
SUMMARY

• There are important gaps in evidence about optimum nutrition and the best ways to support pediatricians and parents in implementation of recommendations

• However, there are general nutrition principles that are clear and evidence-based recommendations which, if followed, would improve child nutrition and health

• It is imperative that evidence-based public policy be developed and implemented to assist pediatricians, family physicians, dietitians, nurses and parents in creating the healthiest diet for children in the US.
SUMMARY (CONTINUED)

• Current USDA Dietary Guidelines for Americans begin at age 2
• Guidelines are needed for the first 2 years of life
• The Birth-24-Month Initiative will provide a systematic review of current data on which Guidelines can be developed