



KAPPING Our Health



Educator's Guide





'KAPping' our health:

regulating our health to improve our nutritional
knowledge, attitudes, and practices.





Introduction

How to use the educator's guide

Lesson Header Format

Each lesson will have a header that summarizes its purpose. It will have the following:

1. **Lesson Topic:** The lesson number and title.
2. **Performance Objective (PO):** The target behavior that should be accomplished after the lesson.
3. **Change Objective (CO):** What needs to be done to accomplish the behavior (PO).
4. **Strategies:** Evidence-based theories for behavior change, chosen for the CO.
5. **Practical Applications:** How strategies are carried out. (ex: activities, songs, etc.)

Lesson Format

Each lesson will have three main components.

1. **Lesson Introduction:** a brief overview on the lesson's focus (ex: this lesson serves to...through this theory...)
2. **Lesson Directions:** a step-by-step explanation on how to instruct the lessons; supplemental student materials are provided.
 - a. The lesson directions are recommended, not enforced; if needed, educators may adjust lesson directions to fit schedule/other needs.
3. **Lesson Content:** the content of the program; what needs to be taught.
 - a. Educators are allowed to print as many copies as needed.

KAP Assessment (Pre/Post-evaluation)

The KAP assessment questionnaire, used to determine the baseline (pre-intervention) nutritional knowledge, attitudes, and practices of the population, is attached for post-intervention evaluation.

The KAP assessment needs to be taken post-intervention to measure effectiveness in changing the nutritional KAP of the population in a positive manner.



Unit 1

Improving Dietary KAP





Lesson 1.3:

Build-Your-Own-Bento-Box!

Performance Objective

PO1.3) Children maintain a healthy diet through consuming a variety of nutrient-dense foods.

Change Objective(s)

CO1.3a) Children know the different food groups and their benefits, with examples.

CO1.3b) Children are aware of their need to eat a variety of foods.

Theory

Modeling

Active learning

Practical Strategy

Drawing

Images

Lesson Introduction

This lesson serves to improve children's knowledge and attitudes regarding their understanding of the different food groups. This lesson utilizes modeling and active learning in the form of a demonstrate-and-replicate lesson.

Lesson Directions

1. Prepare bento-box example.
2. One-by-one, present the different food groups and its subgroups.
3. Teach the benefits of each group/subgroup.
4. Present the bento-box sample, pointing to each food and corresponding it with the food group/subgroup.
5. Use images to introduce more examples of food groups.
6. Instruct children to draw their own bento box, containing foods

Lesson Content

Contents include the lesson, and sample student worksheets.

Lesson 1.3

Build-Your-Own-Bento-Box



Prior to lesson, prepare a "bento-box", or lunch box, containing nutrient-dense foods from all six of the food groups. (Vegetables, fruits, grains, proteins, dairy, and oils.)

Before presenting the bento box, teach the following information. After stating the food group/subgroup, ask students if they can name an example. ("can anyone name an example of a dark-green vegetable?") After students attempt, follow up with the provided examples, and display images.

1. Vegetables

- A healthy diet consists of consuming a variety of vegetables:
 - Dark green vegetables (ex: broccoli, lettuce)
 - Red and orange vegetables (ex: carrots, sweet potatoes)
 - Beans, peas, and lentils (ex: black beans, mung beans)
 - Starchy vegetables (ex: taro root, jicama)
 - Other vegetables (ex: avocado, bamboo shoots, beets, bitter melon, brussels sprouts, cabbage)
- Can be fresh, frozen, or canned; cooked or raw.

2. Fruits

- A healthy diet consists of consuming a variety of fruits:
 - Apples, Asian pears, bananas, berries (ex: blackberries, blueberries, huckleberries, kiwifruit, mulberries, raspberries, and strawberries); citrus fruit (ex: grapefruit, lemons, limes, oranges, and pomelos); cherries, dates, figs, grapes, guava, jackfruit, lychee, mangoes, melons (ex: cantaloupe, honeydew, and watermelon); nectarines, papaya, peaches, pears, persimmons, pineapple, plums, pomegranates, raisins, rhubarb, sapote, and soursop.
- Can be fresh, frozen, canned, or dried; cooked or raw forms.

Lesson 1.3

Build-Your-Own-Bento-Box



3. Grains

- It is important to know the difference between the two types of grains:
 - Whole grains (ex: brown rice, oats, whole-wheat bread, whole-wheat whole-grain cereals and crackers)
 - Refined grains (ex: white breads, refined-grain cereals and crackers, white rice)
- It is recommended to consume more whole grains, and limit refined grains.

4. Dairy and Soy Alternatives

- A healthy diet consists of drinking calcium, through:
 - Dairy (ex: fat-free and low-fat (1%) milk, yogurt, and cheese)
 - Soy beverages (ex: "soy milk", soy yogurt)

5. Proteins

- A healthy diet consists of consuming protein, like
 - Meats, Poultry, Eggs (ex: beef, pork; chicken, turkey; chicken eggs)
 - Seafood (ex: salmon, sardine, shrimp)
 - Nuts, Seeds, Soy Products (ex: tree nuts, peanuts; chia, flax; tofu)
- It is recommended to consume meats fresh, frozen, or canned, and in lean forms (ex: chicken breast, ground turkey), and to limit processed meat (ex: hot dogs, sausages, ham, luncheon meats).

6. Oils

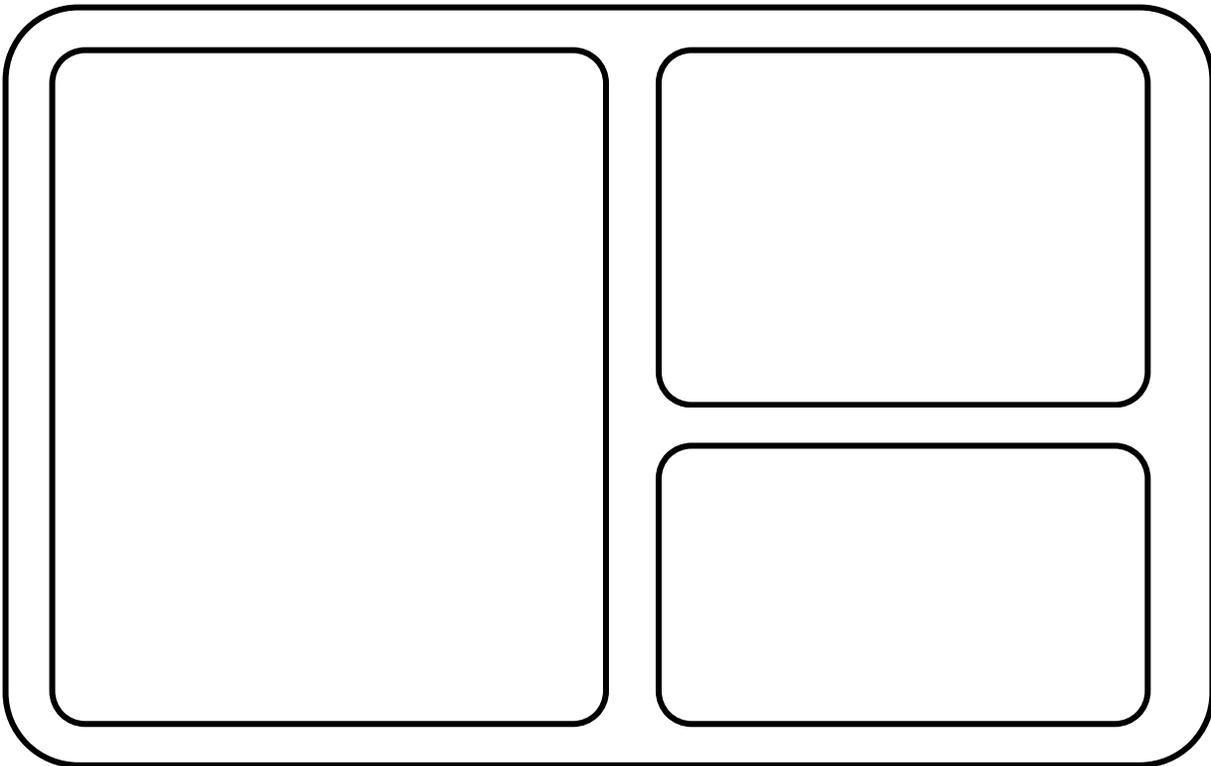
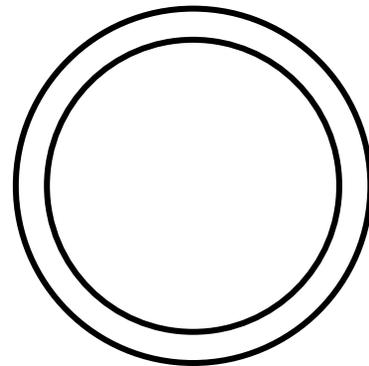
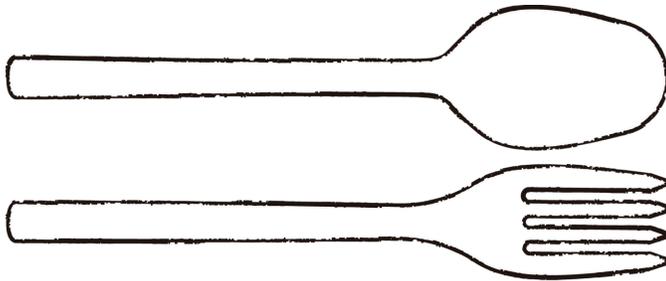
- Commonly used oils include canola, corn, olive, peanut, safflower, soybean, and sunflower oils.
- It is recommended to use vegetable oils, rather than fats like butter, or lard.



Name: _____ Date: _____

Build-Your-Own Bento Box!

Directions: Draw and color a food from every food group into your bento box. Label the food AND the food group. HINT: there are 6 main groups!





Unit 2

Improving Physical Activity KAP





Lesson 2.2:

“Sixty Minutes in a Day” Song

Performance Objective

PO2.2) Children partake in various types of physical activity, and for the optimal amount of time.

Change Objective(s)

CO2.2c) Children demonstrate their capability to partake in various types of physical activity, for the optimal amount of time.

Theory

Guided practice

Practical Strategy

Song

Lesson Introduction

This lesson serves to improve children’s ability to partake in various types of physical activity (aerobic, muscle-strengthening, bone-strengthening), for the optimal amount of time. This lesson utilizes guided practice as children learn a song with the educator.

Lesson Directions

1. Sing the lyrics out to children once.
2. Go line by line, saying a lyric, and ask children to respond back with the same lyric.
3. Repeat the process until the end.
4. Sing the song fully.
5. Go line-by-line, teaching children the hand-movements/body motions.
6. Repeat the process until the end.
7. Sing the song with hand motions fully.

Lesson Content

Lesson contents include “Sixty Minutes in a Day” Song Lyrics (Educator Version) and “Sixty Minutes in a Day” Song Lyrics (Student Version).

Lesson 2.2

“Sixty Minutes in a Day” Song



To the tune of “Mary Had a Little Lamb”. While singing, do actions (that match with the song lyrics) as described below.

(while clapping) Sixty minutes in a day,
In a day, in a day,
Sixty minutes in a day
(make body a starfish shape) To exercise your body!

You can run *(running motion)* and walk *(walking motion)* and dance
(freestyle)

walk *(walking motion)* and dance *(freestyle)*,
walk *(walking motion)* and dance *(freestyle)*

You can run *(running motion)* and walk *(walking motion)* and dance
(freestyle)

(place hands on heart) To get your heart pump-ping!

You can climb *(climb motion)* and pla-ay sports *(mimic sport of choice)*,

pla-ay sports *(mimic sport of choice)*, pla-ay sports *(mimic sport of choice)*

You can climb *(climb motion)* and pla-ay sports *(mimic sport of choice)*,

(flex muscles) To make mus-scles and bones strong!

(while clapping) Sixty minutes in a day,
In a day, in a day,
Sixty minutes in a day
(make body a starfish shape) To exercise your body!

Name: _____ Date: _____



"Sixty Minutes in a Day!" Song Lyrics



Sixty minutes in a day,
In a day, in a day,
Sixty minutes in a day
To exercise your body!



You can run and walk and dance
walk and dance, walk and dance,
You can run and walk and dance
To get your heart pump-ping!

You can climb and pla-ay sports,
pla-ay sports, pla-ay sports,
You can climb and pla-ay sports,
To make mus-cles and bones strong!



Sixty minutes in a day,
In a day, in a day,
Sixty minutes in a day
To exercise your body!



Unit 3

Improving Screentime KAP





Lesson 3.1:

The Screen Beast

Performance Objective 3.1

Children understand screentime usage.

Change Objectives

CO3.1a) Children know the difference between school-related and leisure-related screentime, and the consequences of too much screentime, with examples.

CO3.1b) Children are aware of the need to differentiate types of screentime and moderate screentime in daily life.

Theory

Problem-based learning

Active learning

Practical Strategy

Stories

Lesson Introduction

This lesson serves to improve children's knowledge regarding their understanding of the consequences of screentime. This lesson utilizes problem-based learning in the form of a story, "The Screen Beast", to achieve this behavior.

Lesson Directions

1. Instruct older (4th-5th grade) students to sit down in their seats. For younger students (1st-3rd), instruct them to sit down on an area where the educator is able to read to them.
2. Read aloud "The Screen Beast."
3. For older students, hand them the two-page worksheet for this respective lesson. For younger students, ask them questions from the passage, and allow students to answer by raising their hand.
4. Correct answers using the key, located with lesson content.

Lesson Content

Lesson contents include the story, follow-up questions, and sample student worksheets.

Lesson 3.1

The Screen Beast



Read aloud to students, using a menacing, spooky tone; after reading, see directions below.

Once upon a time, there lived a girl named Lily. She was lively, always wanting to play outside with her friends or explore the wonders of her town. But one day, she noticed something strange.

No children were seen out-and-about. They were all indoors, glued to their screens for hours on end. The friends that Lily once had became distant, their laughter fading into tired eyes and yawns.

Confused, Lily decided to investigate. She followed the faint glow of screens that lit up windows and doorways, she stumbled upon a mysterious alleyway.

Cautiously, Lily braced herself and approached the alleyway. She found herself face to face with a creature unlike anything she had ever seen before: it was the Screen Beast, a massive creature made entirely of glowing screens and tangled wires.

"Who dares disturb my slumber?" boomed the Screen Beast, its voice crackling like static.

"I-I'm sorry," said Lily, trembling with fear. "I didn't mean to intrude. I only wanted to understand why the children in my town are suffering."

The Screen Beast bowed its head in shame. "I am only alive because of children's desires," it admitted. "I thrive on their attention and their constant need for distraction. I never meant to harm them; I only wanted to provide what they sought."

Lily listened intently as the Screen Beast recounted how its presence had brought sleep issues, obesity, learning difficulties, socializing difficulties, eye damage, and other behavioral problems to her fellow friends. Horrified, she thought: *This is what screen time does.*

1. For **older students**, hand out "The Screen Beast" worksheet.
2. For **younger students**, feel free to re-read the passage above before asking these questions: (for answers, see "**Student Key 3.1**")
 - a. What was the main problem of the story?
 - b. Why did the Screen Beast exist?
 - c. Why is it bad to have a lot of screen time? (5 main reasons)

Name: _____ Date: _____



The Screen Beast

Directions: Read the selection below, and answer the following questions.

Once upon a time, there lived a girl named Lily. She was lively and always wanted to play outside with her friends or explore the wonders of her town. But one day, she noticed something strange.

No children were seen out-and-about. They were all indoors, glued to their TV's, iPhones, and tablets for hours, watching Youtube, Netflix, Tiktok...The friends that Lily once had were distant, their laughter fading into tired eyes and yawns.

Confused, Lily decided to investigate. She followed the faint glow of screens that lit up windows and doorways and stumbled upon a mysterious alleyway.

Cautiously, Lily braced herself and approached the alleyway. She found herself face-to-face with a creature unlike anything she had ever seen before: it was the Screen Beast, a massive creature made of glowing screens and tangled wires.

"Who dares disturb my slumber?" boomed the Screen Beast, its voice crackling like static.

"I-I'm sorry," said Lily, trembling with fear. "I didn't mean to intrude. I only wanted to understand why the children in my town are suffering."

The Screen Beast bowed its head in shame. "I am only alive because of children's addiction to their screens," it admitted. "I thrive on their attention and their constant need for distraction."

Lily listened intently as the Screen Beast recounted how its presence had brought sleep issues, obesity, learning difficulties, socializing difficulties, eye damage, and other behavioral problems to her fellow friends. Horrified, she thought: *This is what screen time does.*

The Screen Beast



Directions: Read the selection below, and answer the following questions.

1. What was the main problem of the story?

- A) The children of the town were glued to their screens.
- B) The children of the town were playing outside too much.
- C) Lily could not get off her phone.
- D) The children were asleep.

2. Why did the Screen Beast exist?

- A) His mom took care of him.
- B) The children of the town were hungry.
- C) The children of the town were addicted to their devices.
- D) The Screen Beast ate a lot of food.

3. Why is it bad to have a lot of screen time? (6 main reasons)

sleep issues, obesity

learning difficulties,

socializing difficulties

eye damage, behavioral

problems



KAP Assessment

For Pre-/Post-Evaluation





KAP Assessment

For Pre-/Post-Evaluation

Assessment Guidelines

After the program has been completed, educators will assess the students using the "KAP Assessment" from the *KAPping Our Health: Teacher's Guide*. To maintain replicability, the procedure for assessing the students will be as follows:

1. Introduce the assessment. Introduce the assessment with this script:

"Good morning/afternoon students. Today you be asked one-by-one to answer questions that determine your nutritional knowledge, attitudes about healthy eating, and nutritional practices.

We will ask for your grade and gender, and then ask questions about what you know about nutrition, how you feel about nutrition, and your nutritional practices on a normal day.

I want all of you to answer honestly on these questions. This isn't for a grade and no one will judge you for your answers. I will NOT record your name. This is so we can learn what you already know, how you feel, and you act towards nutrition.

The assessments will help give us ideas for future nutrition lessons to best meet your needs. Thank you!"

2. Assess the student. Interview and record responses, going in order of the determinants; see next pages for KAP Assessment questions.

3. Code responses. Code the responses based on the coding criteria:

To find percentage, add total measured responses (student) and total expected responses (coding criteria) for the selected question. Then, divide the total measured responses by the total expected responses and convert to percentage.

$$\begin{array}{l} \text{Student A: } 3/10 \\ \text{Student B: } 5/10 \\ \text{Student C: } 7/10 \end{array} \left. \vphantom{\begin{array}{l} \text{Student A: } 3/10 \\ \text{Student B: } 5/10 \\ \text{Student C: } 7/10 \end{array}} \right\} \begin{array}{l} 3 + 5 + 7 = 15 \\ 10 + 10 + 10 = 30 \end{array} \left. \vphantom{\begin{array}{l} 3 + 5 + 7 = 15 \\ 10 + 10 + 10 = 30 \end{array}} \right\} 15/30 = 0.5 = 50\%$$

4. Evaluate responses. Compare post-program responses with preliminary responses to measure effectiveness of the program. Use any knowledge gained to increase effectiveness of future KAP nutritional programs.



KAP Assessment

Student Questionnaire

Dietary KAP Questionnaire

Knowledge	Attitudes	Practices
<p>(K1.1) Can you have problems if you don't eat before going to school? What problems?</p> <p>(K1.2) Is it bad to eat too many sweets and candies? Why or why not?</p> <p>(K1.3) What are the different food groups, and why are they important?</p> <p>(K1.4) Is it good to drink water? Why or why not?</p>	<p>(A1.1) Is it good to have breakfast before school? Is it hard for you to have breakfast before school? If so, why?</p> <p>(A1.2) Is it good to have three meals a day? Is it hard for you to have three meals a day? If so, why?</p> <p>(A1.3) Is it good to have different types of foods at meals? Is it hard for you to have different types of foods at meals? If so, why?</p> <p>(A1.4) Is it good to drink water often? Is it hard for you to drink water often? If so, why?</p>	<p>(P1.1) Did you have breakfast before going to school? If so, what did you have for breakfast? When? Where?</p> <p>(P1.2) Did you have lunch yesterday? If so, what did you have for lunch? When? Who made your lunch?</p> <p>(P1.3) Did you have dinner yesterday? If so, what did you have for dinner? When? Where?</p> <p>(P1.4) Did you eat any snacks/drinks today? If so, what did you eat/drink?</p> <p>(P1.5) Did you drink water today? If so, how much did you drink?</p>



KAP Assessment

Student Questionnaire

Physical Activity KAP Questionnaire

Knowledge	Attitudes	Practices
(K2) Is exercising important? Why or why not?	(A2) Is it good to exercise daily? Is it hard for you to exercise daily? If so, why?	(P2) Did you exercise yesterday/today? If so, how did you exercise, and for how long?

Screening KAP Questionnaire

Knowledge	Attitudes	Practices
(K3) Is it bad to have too much screentime? Why or why not?	(A3) Is it bad to have screentime? Is it easy for you to have screentime? Why?	(P3) Do you use devices (ex: iPhones, iPads, laptops, etc.)? If so, what do you usually do on your device(s), and what is your screentime per day?

Sleep Habits KAP Questionnaire

Knowledge	Attitudes	Practices
(K4) Can you have problems if you don't sleep? What problems?	(A4) Is it good to sleep? Is it hard for you to sleep? Why or why not?	(P4) How much sleep do you get at night?



KAP Assessment

Coding Criteria

Dietary KAP Questions (Coding Criteria)

Knowledge	Attitudes	Practices
<p>(K1.1) Yes (1)/No (0); Children have short attention (1); have low concentration (1); cannot study well (1); and do not do as well at school as they should (1); risk chronic disease; like diabetes and obesity (1); energy deficiency (1); stomach issues (1). (#/8)</p>	<p>(A1.1) Yes (1) /No (0); Expected responses vary. No difficulty (1) indicates positive attitudes. Difficulty (0) indicates negative attitudes. (#/2)</p>	<p>(P1.1) Yes (1) /No (0); Expected responses vary. Responses evaluated through the DGA 2020-2025. (#/1)</p>
<p>(K1.2) Yes(1)/No (0); Because they can cause tooth decay (1), are not nutritious (1), and interfere with appetite (1); risk chronic disease, like diabetes (1); hyperactivity (1); thirst (1); cardiovascular disease (1). (#/8)</p>	<p>(A1.2) Yes (1)/No (0); Expected responses vary. No difficulty (1) indicates positive attitudes. Difficulty (0) indicates negative attitudes. (#/2)</p>	<p>(P1.2) Yes (1)/No (0); Expected responses vary. Responses evaluated through the DGA 2020-2025. (#/1)</p>
<p>(K1.3) Vegetables (1), fruits (1), grains (1), proteins (1), dairy (1), oils (1). 'Provide vitamins (1) and minerals to the body' (1); promotes growth and development (1) 'prevent diseases (1) and poor health' (1) (#/11)</p>	<p>(A1.3) Yes (1)/No (0); Expected responses vary. No difficulty (1) indicates positive attitudes. Difficulty (0) indicates negative attitudes. (#/2)</p>	<p>(P1.3)Yes (1)/No (0); Expected responses vary. Responses evaluated through the DGA 2020-2025. (#/1)</p>
<p>(K1.4) Yes (1)/ No (0); hydration (1), regulates body temperature (1) (#/3)</p>	<p>(A1.4) Yes (1)/No (0); Expected responses vary. No difficulty (1) indicates positive attitudes. Difficulty (0) indicates negative attitudes. (#/2)</p>	<p>(P1.4) Yes (1)/No (0); Expected responses vary. Responses evaluated through the DGA 2020-2025. (#/1)</p> <p>(P1.5) Yes (1)/No (0); Expected responses vary. Responses evaluated through the DGA 2020-2025. (#/1)</p>



KAP Assessment

Coding Criteria

Physical Activity KAP Questions (Coding Criteria)

Knowledge	Attitudes	Practices
(K2) Yes (1) /No (0); It improves 'movement skills (1), healthy habits (1), bone health (1), cardiorespiratory (1)/muscular (1) fitness, cognition (1), and mental health (1); aesthetics (1) (#/9)	(A2) Yes (1)/No (0); Expected responses vary. No difficulty (1) indicates positive attitudes EX: aesthetics. Difficulty (0) indicates negative attitudes EX: physical risks. (#/2)	(P2) Yes (1)/No (0); Expected responses vary; 60min ≤ exercise (1); 60min ≥ exercise (0); sign of aerobic, muscle-strengthening, bone-strengthening activity (1) (#/3)

Screening KAP Questions (Coding Criteria)

Knowledge	Attitudes	Practices
(K3) Yes (1)/No (0); Children have sleep issues (1), obesity (1), trouble learning (1), trouble socializing (1), decreased focus (1), screen dependency (1), behavioral (risky/violent) problems (1), and eye damage (1). (#/9)	(A3) Yes (1)/No (0)/Yes and no (1); Expected responses vary. Evaluate positive attitudes based on answers indicating moderation of screentime (1); negative attitudes display no awareness of moderation (0). (#/2)	(P3) Yes (1)/No (0); Expected responses vary; 2 hours ≥ screentime (1); 2 hours ≤ screentime (0); leisure-related screentime (1); school-related screentime (0). (#/3)



KAP Assessment

Coding Criteria

Sleep Habits KAP Questions (Coding Criteria)

Knowledge	Attitudes	Practices
<p>Yes (1)/No (0); Children have irritability (1), difficulty concentrating (1), hypertension (1), obesity (1), headaches (1), depression (1), weakness (1), worse school performance (1)/memory (1), decreased mental health (1); tiredness (1); impaired growth and development (1) (AAP, 2024) (#/13)</p>	<p>(A4) Yes (1)/No (0); Expected responses vary. No difficulty (1) indicates positive attitudes. Difficulty (0) indicates negative attitudes. (AAP, 2024) (#/2)</p>	<p>(P4) From 8-12 hours of sleep (1); \leq/\geq 8-12 hours of sleep (0). (AAP, 2024) (#/1)</p>