

Mobile App Rating Scale

Record ID

Name of smartphone app

Rating of this version of smartphone app

Rating of all versions of smartphone app

Developer

Which version of the app is this?

When was this app last updated?

What is the cost of the basic version of the app?

What is the cost of the upgraded version of the app?

(This can be 'in-app purchases' for an app that is free to download; or a separate 'paid/premium/pro' version of the app that must be paid for at download.)

What platform are you using this app on?

- iPhone
 Android

Please provide a brief description of this app - see its app store listing About section as a guide.

Which app store search did you find this app in?

- Infant feeding
 Introducing solids
 Infant activity

What theoretical background or strategies does this app use?

- Assessment
 Feedback
 Information/education
 Monitoring/tracking
 Goal setting
 Advice/tips/strategies/skills training

Are there organisations or groups affiliated with this app?

- Unknown/do not know
 Commercial
 Government
 Non-government organisations
 University
 Does not have any affiliations

What are the technical aspects of this app?

- Allows sharing on social media (Facebook, Twitter, etc.)
 Has an app community
 Allows password protection
 Requires login
 Sends reminders
 Needs internet access to function

If there are other technical aspects of this app not covered, describe them here.

The Mobile Application Rating Scale (MARS) assesses app quality on four dimensions. All items are rated on a 5-point scale from "1. Inadequate" to "5. Excellent". Select the number that most accurately represents the quality of the app component you are rating. Please use the descriptors provided for each response category.

The MARS is used to evaluate apps.

Note - you may want to complete:

- the "Website and app content based on 2012 Infant Feeding Guidelines"

- the "Suitability Assessment of Material"

forms first to assess the app - this can help guide your Section D response.

SECTION A: Engagement - fun, interesting, customisable, interactive (e.g. sends alerts, messages, reminders, feedback, enables sharing), well-targeted to audience

1. Entertainment: Is the app fun/entertaining to use? Does it use any strategies to increase engagement through entertainment (e.g. through gamification)?

1. Dull, not fun or entertaining at all
 2. Mostly boring
 3. OK, fun enough to entertain user for a brief time (< 5 minutes)
 4. Moderately fun and entertaining, would entertain user for some time (5-10 minutes total)
 5. Highly entertaining and fun, would stimulate repeat use

2. Interest: Is the app interesting to use? Does it use any strategies to increase engagement by presenting its content in an interesting way?

1. Not interesting at all
 2. Mostly uninteresting
 3. OK, neither interesting nor uninteresting; would engage user for a brief time (< 5 minutes)
 4. Moderately interesting; would engage user for some time (5-10 minutes total)
 5. Very interesting, would engage user in repeat use

3. Customisation: Does it provide/retain all necessary settings/preferences for apps features (e.g. sound, content, notifications, etc.)?

- 1. Does not allow any customisation or requires setting to be input every time
- 2. Allows insufficient customisation limiting functions
- 3. Allows basic customisation to function adequately
- 4. Allows numerous options for customisation
- 5. Allows complete tailoring to the individual's characteristics/preferences, retains all settings

4. Interactivity: Does it allow user input, provide feedback, contain prompts (reminders, sharing options to social media/through email or Bluetooth, notifications, etc.)? Note: these functions need to be customisable and not overwhelming in order to be perfect.

- 1. No interactive features and/or no response to user interaction
- 2. Insufficient interactivity, or feedback, or user input options, limiting functions
- 3. Basic interactive features to function adequately
- 4. Offers a variety of interactive features/feedback/user input options
- 5. Very high level of responsiveness through interactive features/feedback/user input options

5. Target group: Is the app content (visual information, language, design) appropriate for your target audience?

- 1. Completely inappropriate/unclear/confusing
- 2. Mostly inappropriate/unclear/confusing
- 3. Acceptable but not targeted. May be inappropriate/unclear/confusing
- 4. Well-targeted, with negligible issues
- 5. Perfectly targeted, no issues found

Admin only: Mean Engagement score.

SECTION B: Functionality - app functioning, easy to learn, navigation, flow logic, and gestural design of app

6. Performance: How accurately/fast do the app features (functions) and components (buttons/menus) work?

- 1. App is broken; no/insufficient/inaccurate response (e.g. crashes/bugs/broken features, etc.)
- 2. Some functions work, but lagging or contains major technical problems
- 3. App works overall. Some technical problems need fixing/slow at times
- 4. Mostly functional with minor/negligible problems
- 5. Perfect/timely response; no technical bugs found/contains a 'loading time left' indicator

7. Ease of use: How easy is it to learn how to use the app; how clear are the menu labels/icons and instructions?

E.g. are the functions of the app intuitive and do they operate as expected?

- 1. No/limited instructions; menu labels/icons are confusing; complicated
- 2. Useable after a lot of time/effort
- 3. Useable after some time/effort
- 4. Easy to learn how to use the app (or has clear instructions)
- 5. Able to use app immediately; intuitive; simple

8. Navigation: Is moving between screens logical/accurate/appropriate/uninterrupted; are all necessary screen links present?

E.g. navigation between screens should be able to be reached in as few actions as possible - from the main page of the subsection (e.g. a new record section, or result section), it should not take more than three navigational actions to reach a page.

Navigation should also be logical, intuitive and clearly indicated, with signs obvious and not obscured.

- 1. Different sections within the app seem logically disconnected and random/confusing/navigation is difficult
- 2. Usable after a lot of time/effort
- 3. Usable after some time/effort
- 4. Easy to use or missing a negligible link
- 5. Perfectly logical, easy, clear and intuitive screen flow throughout, or offers shortcuts

9. Gestural design: Are interactions (taps/swipes/pinches/scrolls) consistent and intuitive across all components/screens?

E.g. interactive items should be stylistically indicated as being able to be tapped, swiped, pinched or scrolled.

- 1. Completely inconsistent/confusing
- 2. Often inconsistent/confusing
- 3. OK with some inconsistencies/confusing elements
- 4. Mostly consistent/intuitive with negligible problems
- 5. Perfectly consistent and intuitive

Admin only: Mean Functionality score.

SECTION C: Aesthetics - graphic design, overall visual appeal, colour scheme, and stylistic consistency

10. Layout: Is arrangement and size of buttons/icons/menus/content on the screen appropriate or zoomable if needed?

- 1. Very bad design, cluttered, some options impossible to select/locate/see/read device display not optimised
- 2. Bad design, random, unclear, some options difficult to select/locate/see/read
- 3. Satisfactory, few problems with selecting/locating/seeing/reading items or with minor screen size problems
- 4. Mostly clear, able to select/locate/see/read items
- 5. Professional, simple, clear, orderly, logically organised, device display optimised. Every design component has a purpose

11. Graphics: How high is the quality/resolution of graphics used for buttons/icons/menus/content?

- 1. Graphics appear amateur, very poor visual design - disproportionate, completely stylistically inconsistent
- 2. Low quality/low resolution graphics; low quality visual design - disproportionate, stylistically inconsistent
- 3. Moderate quality graphics and visual design (generally consistent in style)
- 4. High quality/resolution graphics and visual design - mostly proportionate, stylistically consistent
- 5. Very high quality/resolution graphics and visual design - proportionate, stylistically consistent throughout

12. Visual appeal: How good does the app look?

Consider:

- consistent colour scheme
- visually accessible colour choices (easy to read with normal or corrected vision)
- legible font sizes, consistent font themes (1-2 fonts used logically, not different fonts used inconsistently)

- 1. No visual appeal, unpleasant to look at, poorly designed, clashing/mismatched colours
- 2. Little visual appeal - poorly designed, bad use of colour, visually boring
- 3. Some visual appeal - average, neither pleasant, nor unpleasant
- 4. High level of visual appeal - seamless graphics - consistent and professionally designed
- 5. As above + very attractive, memorable, stands out; use of colour enhances app features/menus

Admin only: Mean Aesthetics score.

SECTION D: Information - Contains high quality information (e.g. text, feedback, measures, references) from a credible source. Select N/A if the app component is irrelevant.

13. Accuracy of app description (in app store): Does app contain what is described in its About section?

- 1. Misleading. App does not contain the described components/functions. Or has no description
- 2. Inaccurate. App contains very few of the described components/functions
- 3. OK. App contains some of the described components/functions
- 4. Accurate. App contains most of the described components/functions
- 5. Highly accurate description of the app components/functions

14. Goals: Does app have specific, measurable and achievable goals (specified in app store description or within the app itself)?

- N/A. Description does not list goals, or app goals are irrelevant to research goal (e.g. using a game for educational purposes)
- 1. App has no chance of achieving its stated goals
- 2. Description lists some goals, but app has very little chance of achieving them
- 3. OK. App has clear goals, which may be achievable.
- 4. App has clearly specified goals, which are measurable and achievable
- 5. App has specific and measurable goals, which are highly likely to be achieved

15. Quality of information: Is app content correct, well written, and relevant to the goal/topic of the app?

Note: refer to your overall score for this app on the "Suitability Assessment of Material" form.

Suggestion:

For "70-100%, superior material" ratings, score 4 or 5 here.

For "40-69%, adequate material" ratings, score 3 or 4 here.

For "0-39%, not suitable material" ratings, score 1 or 2 here.

- N/A. There is no information within the app
- 1. Irrelevant/inappropriate/incoherent/incorrect
- 2. Poor. Barely relevant/appropriate/coherent/may be incorrect
- 3. Moderately relevant/appropriate/coherent/and appears correct
- 4. Relevant/appropriate/coherent/correct
- 5. Highly relevant, appropriate, coherent, and correct

16. Quantity of information: Is the extent coverage within the scope of the app; and comprehensive but concise?

Note: refer to your overall score for this app on the "Website and app content based on 2012 Infant Feeding Guidelines" form.

Suggestion:

For "≥90%, excellent" ratings, score 5 here.

For "75-89%, adequate" ratings, score 3 or 4 here.

For "≤74%, poor" ratings, score 1 or 2 here.

- N/A. There is no information within the app
- 1. Minimal or overwhelming
- 2. Insufficient or possibly overwhelming
- 3. OK but not comprehensive or concise
- 4. Offers a broad range of information, has some gaps or unnecessary detail; or has no links to more information and resources
- 5. Comprehensive and concise; contains links to more information and resources

17. Visual information: Is visual explanation of concepts - through charts/graphs/images/videos, etc. - clear, logical, correct?

- N/A. There is no visual information within the app (e.g. it only contains audio, or text)
- 1. Completely unclear/confusing/wrong or necessary but missing
- 2. Mostly unclear/confusing/wrong
- 3. OK but often unclear/confusing/wrong
- 4. Mostly clear/logical/correct with negligible issues
- 5. Perfectly clear/logical/correct

18. Credibility: Does the app come from a legitimate source (specified in app store description or within the app itself)?

Note: legitimacy of the source will include professional input - e.g. from a clinician, nutritionist, dietitian, nurse, midwife, paediatrician, lactation consultant, physiotherapist, occupational therapist or physician

- 1. Source identified but legitimacy/trustworthiness of source is questionable (e.g. commercial business with vested interest)
- 2. Appears to come from a legitimate source, but it cannot be verified (e.g. has no webpage)
- 3. Developed by small NGO/institution (hospital/centre, etc.) /specialised commercial business, funding body
- 4. Developed by government, university or as above but larger in scale
- 5. Developed using nationally competitive government or research funding (e.g. Australian Research Council, NHMRC)

An example of searching specifically for smartphone apps or mHealth topics is attached.

About 6,080 results (0.10 sec)

- [CITATION] Urban agriculture: **Growing healthy**, sustainable places
K Hodgson, MC Campbell, M Balkay - 2011 - American Planning Association
☆ ⓘ Cited by 147 Related articles ⓘ
- Teachers' use of health curricula: implementation of **Growing Healthy** Project SMART, and the Teenage Health Teaching Modules
DW Smith, LK McCormick, AB Steckler... - Journal of School ..., 1993 - Wiley Online Library
This quasi-experimental study assessed impact of factors associated with classroom implementation of health curricula by North Carolina teachers. School representatives selected and implemented one of three tobacco...
- [HTML] **Growing healthy kids**: a community-based program
DC Castro, M Samuels, AE Harman - American Journal of Public Health, 2010
Background Childhood obesity has increased, particularly among children aged 2-5 years. In 2008, 17.8% of children aged 2-5 years had the highest prevalence of obesity. Purpose This paper describes a pilot study to...
- [BOOK] Discipled warriors: **Growing healthy** churches that are equipped for spiritual warfare
CE Lawless, C Lawless - 2002 - books.google.com
Discipleship is the boot camp for spiritual warfare. Using solid biblical exegesis, Chuck Lawless deftly presents a well rounded, proven model for fighting the enemy through the development of a spiritually healthy church. He demonstrates that "putting on the armor of God" is ...
☆ ⓘ Cited by 79 Related articles

Without specifying 'app', mHealth or focused content (e.g. infant feeding, introduction to solids, active play), it is easy to find non-specific results.

About 331 results (0.07 sec)

- [HTML] Assessing user engagement of an mHealth intervention: development and implementation of the **growing healthy app** engagement index
S Taki, S Lymer, CG Russell, K Campbell... - JMIR mHealth and ..., 2017 - ncbi.nlm.nih.gov
Background Childhood obesity is an ongoing problem in developed countries that needs targeted prevention in the youngest age groups. Children in socioeconomically disadvantaged families are most at risk. Mobile health (mHealth) interventions offer a ...
☆ ⓘ Cited by 12 Related articles All 9 versions
- [HTML] A comparison of recruitment methods for an mHealth intervention targeting mothers: lessons from the **growing healthy** program
RA Laws, EKV Litterbach... - Journal of medical ..., 2016 - ncbi.nlm.nih.gov
... and enable access to information across demographic groups [5]. Lastly, **apps** designed for ... recently developed an mHealth intervention for parents of young infants (**growing healthy**) that encourages ... The program consists of an **app** and website [22], providing parents with a one ...
☆ ⓘ Cited by 18 Related articles All 10 versions Web of Science: 6
- [HTML] Preventing obesity in infants: the **growing healthy** feasibility trial protocol
E Denney-Wilson, R Laws, CG Russell, K Ong... - BMC open, 2016 - bmjopen.bmj.com
... feeding. 18 However a recent study found the quality of websites and **apps** on infant ... This paper describes the development and protocol for the **Growing healthy** study, a non-randomised ... PHC examining the feasibility of an intervention delivered via a smartphone **app** (or website ...
☆ ⓘ Cited by 19 Related articles All 12 versions Web of Science: 7 ⓘ
- [CITATION] Assessing user engagement of an mHealth intervention: development and implementation of the **growing healthy app** engagement index. JMIR Mhealth ...
S Taki, S Lymer, CG Russell, K Campbell, R Laws...
☆ ⓘ Cited by 4 Related articles

19. Evidence base: Has the app been trialled/tested; must be verified by evidence (in published scientific literature)?

Note: to check if this app has been published in scientific literature, search for the name of the app in Google Scholar.

- N/A. The app has not been trialled/tested
 1. The evidence suggests the app does not work
 2. App has been trialled (e.g., acceptability, usability, satisfaction ratings) and has partially positive outcomes in studies that are not randomised controlled trials (RCTs), or there is little or no contradictory evidence.
 3. App has been trialled (e.g., acceptability, usability, satisfaction ratings) and has positive outcomes in studies that are not RCTs, and there is no contradictory evidence.
 4. App has been trialled and outcome tested in 1-2 RCTs indicating positive results
 5. App has been trialled and outcome tested in >3 high quality RCTs indicating positive results

Admin only: Sum of Information scores (will not include N/A scores).

Admin only: Possible points for Section D (does not include N/A scores).

Admin only: Mean Information score.

SECTION E: App subjective quality

20. Would you recommend this app to people who might benefit from it?

1. Not at all - I would not recommend this app to anyone
 2. There are very few people I would recommend this app to
 3. Maybe - There are several people whom I would recommend it to
 4. There are many people I would recommend this app to
 5. Definitely - I would recommend this app to everyone

21. How many times do you think you would use this app in the next 12 months if it was relevant to you?

1. None
 2. 1-2
 3. 3-10
 4. 10-50
 5. >50

22. Would you pay for this app?

1. No
 3. Maybe
 5. Yes

23. What is your overall star rating of the app?

- * One of the worst apps I've used
 **
 *** Average

 ***** One of the best apps I've used

REVIEWER-DESIGNED SUBSCALE: Accessibility

24. Is the app available in other languages? No
 Yes

25. Can data be easily inputted into this app, reducing or avoiding the need for user to use both hands? No
 Yes
 Not applicable

26. Does the application provide a help or user guide? No
 Yes
 Not applicable

Check your response to Q7.

27. Does the application provide a way of contacting the developers for support? No or not found
 Yes

Note: you should be able to do this as part of the app, without going back to the App Store or Google Play listing.

Admin only: Sum of Accessibility (subscale) score.

Admin only: Possible points for Accessibility subscale (does not include N/A scores).

Admin only: Mean Accessibility (subscale) score.

REVIEWER-DESIGNED SUBSCALE: Security

28. User data should be kept private and safe - is the data inputted into the app encrypted in the event of loss or system malfunction? No or not found
 Yes
 Not applicable

29. Can information be backed up or restored, in case of device malfunction, data loss or deletion of app? No or not found
 Yes
 Not applicable

30. Does the app developer/publisher clearly state the privacy policy regarding how confidential, private or semi-private information will be treated? No or not found
 Yes
 Not applicable

Admin only: Sum of Security (subscale) score.

Admin only: Possible points for Security subscale (does not include N/A scores).

Admin only: Mean Security (subscale) score.

SCORING

Admin only: App subjective quality mean score

Admin only: modified MARS app quality mean score

Mean of sections A, B, C, D, Accessibility subscale,
Security subscale

Admin only: MARS app quality mean score

Mean of sections A, B, C, D only

Is the MARS app quality score (mean of sections A to
D) the same as the modified MARS app quality score
(mean of sections A to D, Accessibility subscale,
Security subscale)?

- No
 Yes

App content based on 2012 Infant Feeding Guidelines

Record ID _____

Topics were identified using the National Health and Medical Research Council's Infant Feeding Guidelines (2012), the Department of Health and Ageing's National Physical Activity Recommendations for Children 0-5 Years (2010) and primary literature. These were used to determine adequate coverage of the relevant material and the scientific accuracy of this information on apps.

Please select answers based on the focus of the smartphone app (i.e. infant feeding, introducing solids or infant activity) and select N/A for the other sections that are not applicable.

Name of smartphone app _____

Which app store search did you find this app in?

- Infant feeding
 Introducing solids
 Infant activity

What platform are you using this app on?

- iPhone
 Android

Is the revision/last update date for this app recent enough to account for changes in the field?

- No or no last update date given
 Yes

i.e. is the revision/last update date after the publication of the NHMRC Infant Feeding Guidelines in 2012 or the National Physical Activity Recommendations for Children 0-5 years olds in 2010?

COVERAGE of infant feeding content in apps

| | Correct advice (+1) | Incorrect advice (-1) | Not addressed (0) | N/A - not the focus of this app |
|---|-----------------------|-----------------------|-----------------------|---------------------------------|
| Encouraging and supporting breastfeeding: Breastfeeding as the physiological norm | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Encouraging and supporting breastfeeding: Protection and promotion of breastfeeding | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Initiating breastfeeding: Breastfeeding education for parents | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Initiating breastfeeding: Physiology of breast milk and breastfeeding | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Initiating breastfeeding: The first breastfeed | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

| | | | | |
|---|-----------------------|-----------------------|-----------------------|-----------------------|
| Establishing and maintaining breastfeeding: Difficulty establishing breastfeeding | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Establishing and maintaining breastfeeding: Factors affecting establishment of breastfeeding | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Establishing and maintaining breastfeeding: Monitoring an infant's progress | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Establishing and maintaining breastfeeding: Maternal nutrition | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Breastfeeding, common problems and their management: Maternal factors affecting breastfeeding | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Breastfeeding, common problems and their management: Infant factors affecting breastfeeding | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Expressing and storing breast milk: Expressing breast milk | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Expressing and storing breast milk: Feeding with expressed breast milk | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Expressing and storing breast milk: Storage of expressed breast milk | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Breastfeeding in specific situations: Tobacco, alcohol and other drugs | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Infant formula: Preparing infant formula | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Infant formula: Using infant formula | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Infant formula: Special infant formula | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

DEPTH of infant feeding content in apps.**If not applicable, this section will stay blank.****For the above infant feeding topics that were available in the app, score this information as being 'complete', 'partially complete' or 'incomplete or incorrect'.**

| | Partially complete (+0.5) | Complete (+1) | Incomplete or incorrect information (0) |
|---|---------------------------|-----------------------|---|
| Encouraging and supporting breastfeeding: Breastfeeding as the physiological norm | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Encouraging and supporting breastfeeding: Protection and promotion of breastfeeding | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Initiating breastfeeding: Breastfeeding education for parents | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Initiating breastfeeding: Physiology of breast milk and breastfeeding | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Initiating breastfeeding: The first breastfeed | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Establishing and maintaining breastfeeding: Difficulty establishing breastfeeding | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Establishing and maintaining breastfeeding: Factors affecting establishment of breastfeeding | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Establishing and maintaining breastfeeding: Monitoring an infant's progress | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Establishing and maintaining breastfeeding: Maternal nutrition | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Breastfeeding, common problems and their management: Maternal factors affecting breastfeeding | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Breastfeeding, common problems and their management: Infant factors affecting breastfeeding | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Expressing and storing breast milk: Expressing breast milk | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

| | | | |
|--|-----------------------|-----------------------|-----------------------|
| Expressing and storing breast milk: Feeding with expressed breast milk | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Expressing and storing breast milk: Storage of expressed breast milk | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Breastfeeding in special situations: Tobacco, alcohol and other drugs | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Infant formula: Preparing infant formula | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Infant formula: Using infant formula | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Infant formula: Special infant formula | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

ADMIN ONLY: Coverage of infant feeding content

ADMIN ONLY: Depth of infant feeding content

ADMIN ONLY: Total of number of points possible on infant feeding content.

COVERAGE of introducing solids content in apps

| | Correct advice (+1) | Incorrect advice (-1) | Not addressed (0) | N/A - not the focus of this app |
|---|-----------------------|-----------------------|-----------------------|---------------------------------|
| Introducing solids: When should solid foods be introduced? | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Introducing solids: What foods should be introduced | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Introducing solids: Foods and beverages most suitable for infants, or that should be used in care | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Introducing solids: Healthy foods in the first 12 months (continued exposure and opportunity to sample a wide variety of healthy foods) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

DEPTH of introducing solids content in apps.

If not applicable, this section will stay blank.

For the above introducing solids topics that were available in the app, score this information as being 'complete', 'partially complete' or 'incomplete or incorrect'.

| | Partially complete (+0.5) | Complete (+1) | Incomplete or incorrect information (0) |
|---|---------------------------|-----------------------|---|
| Introducing solids: When should solid foods be introduced? | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Introducing solids: What solid foods should be introduced | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Introducing solids: Foods and beverages most suitable for infants, or that should be used in care | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Introducing solids: Healthy foods in the first 12 months (continued exposure and opportunity to sample a wide variety of healthy foods) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

ADMIN ONLY: Coverage of introducing solids content

ADMIN ONLY: Depth of introducing solids content

ADMIN ONLY: Total of number of points possible on infant feeding content.

COVERAGE of infant activity content in apps

| | Correct advice (+1) | Incorrect advice (-1) | Not addressed (0) | N/A - not the focus of this app |
|---|-----------------------|-----------------------|-----------------------|---------------------------------|
| Infant activity: Encouraging physical activity for infants from birth for healthy development | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Infant activity: Advice on types of infant physical activity/movements for development including; reaching and grasping, pulling and pushing, moving their head, body and limbs during daily routines, and supervised floor play, including tummy time

DEPTH of infant activity content in apps.

If not applicable, this section will stay blank.

For the above infant activity topics that were available in the app, score this information as being 'complete', 'partially complete' or 'incomplete or incorrect'.

| | Partially complete (+0.5) | Complete (+1) | Incomplete or incorrect information (0) |
|--|---------------------------|-----------------------|---|
| Infant activity: Encouraging physical activity for infants from birth for healthy development | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Infant activity: Advice on types of infant physical activity/movements for development including; reaching and grasping, pulling and pushing, moving their head, body and limbs during daily routines, and supervised floor play, including tummy time | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

ADMIN ONLY: Coverage of infant activity content

ADMIN ONLY: Depth of infant activity content

Admin only: Total of number of points possible for infant activity content.

SCORING

ADMIN ONLY: Total of all coverage scores, including 1 point for currency

ADMIN ONLY: Total of all depth scores, including 1 point for currency

ADMIN ONLY: Total of all possible points, including 1 point for currency

ADMIN ONLY: Overall coverage rating score (%)

Please select the overall coverage rating, corresponding to the above.

- $\geq 90\%$, excellent
- 75-89%, adequate
- $\leq 74\%$, poor

ADMIN ONLY: Overall depth rating score (%)

Please select the overall depth rating, corresponding to the above.

- 100%, complete coverage
- 50-99%, partial coverage
- $\leq 49\%$, low or no coverage

Suitability Assessment of Material

Record ID _____

Note: make sure you do the Simple Measure of Gobbledygook test and the Flesch-Kincaid readability tests first - this is a component of the Suitability Assessment of Material (SAM) form.

Instructions:

1. Read through the SAM factor list and the evaluation criteria on the score sheet. It is best to have a copy of the SAM beside you as you evaluate using this form - it has been abbreviated for us in this form.

A copy of the SAM is attached to this form.

2. Read the material (the app) you want to evaluate and determine its purpose(s) and key points.

3. For short documents (for example a pamphlet or single page of text), evaluate the entire piece.

For longer documents (for example a booklet), select samples of key sections to evaluate, or three pages that cover topics central to the purpose of the booklet.

For documents longer than 50 pages, increase the sample size to six pages.

4. Evaluate and score each of the 22 SAM factors using the evaluation criteria provided, and circle the appropriate score on the score sheet. The scoring system provides:

- 2 points per factor for superior rating
- 1 point per factor for adequate rating
- 0 points per factor for not suitable rating.

As you evaluate each factor, you are likely to find wide variation in different parts of your material. For any one factor, some parts may rate high (superior), while other parts may rate low (unsuitable). Resolve this by giving most weight to the part of your material that includes the key points that you identified in step 2 above.

[Attachment: "SAM.pdf"]

Name of smartphone app _____

Which app store search did you find this app in?

- Infant feeding
 Introducing solids
 Infant activity

What platform are you using this app on?

- iPhone
 Android

SECTION 1 - Content

| | 0. Not suitable | +1. Adequate | +2. Superior | Not applicable |
|--|-----------------------|-----------------------|-----------------------|-----------------------|
| Purpose is evident. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Content about behaviours. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Scope is limited to essential information. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Summary and review.

Admin only: SECTION 1 score

SECTION 2 - Literacy Demand

| | 0. Not suitable | +1. Adequate | +2. Superior | Not applicable |
|-------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Reading grade level. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Writing style, active voice. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Vocabulary uses common words. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Context is given first. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Headers or topic captions. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Admin only: SECTION 2 score

SECTION 3 - Graphics

| | 0. Not suitable | +1. Adequate | +2. Superior | Not applicable |
|---|-----------------------|-----------------------|-----------------------|-----------------------|
| Cover graphic shows purpose. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Type of illustrations. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Relevance of illustrations. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Lists, tables, graphs and charts explained. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Captions used for graphics. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Admin only: SECTION 3 score

SECTION 4 - Layout and typography

| | 0. Not suitable | +1. Adequate | +2. Superior | Not applicable |
|-------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Layout factors. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Typography. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Subheadings used. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Admin only: SECTION 4 score

SECTION 5 - Learning, stimulation, motivation

| | 0. Not suitable | +1. Adequate | +2. Superior | Not applicable |
|--|-----------------------|-----------------------|-----------------------|-----------------------|
| Interaction with readers used. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Behaviours are modelled and specific. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Motivation with self-efficable tasks and behaviours. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Admin only: SECTION 5 score

SECTION 6 - Cultural appropriateness

| | 0. Not suitable | +1. Adequate | +2. Superior | Not applicable |
|------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Cultural match. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Cultural image and examples. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Admin only: SECTION 6 score

SCORING

Admin only: Total of number of points possible (44 minus [2 x each N/A response])

Admin only: Total SAM score (sum of all scored items)

Admin only: Calculated overall rating score (%)

Please select the overall rating, corresponding to the above overall score.

- 70-100%, superior material
 40-69%, adequate material
 0-39%, not suitable material

Readability tests

Record ID _____

The Flesch-Kincaid (F-K) and Simple Measure of Gobbledygook (SMOG) tools will be used to measure readability.

This measure of readability will be used when using the Suitability Assessment of Material.

NOTE: make sure you use the same block of writing in the F-K and SMOG tests.

Name of smartphone app _____

Which app store search did you find this app in?

- Infant feeding
 Introducing solids
 Infant activity

Which app store did you find this app in?

- iPhone
 Android

Part 1: Select a paragraph of text you will analyse.

Part 2: Calculate the SMOG and F-K grade using this website:

<http://www.readabilityformulas.com/free-readability-formula-tests.php>

Part 3: Calculate the F-K grade using Microsoft Word. You will need Microsoft Word 2007 or Microsoft Word 2010.

Find instructions here:

<https://support.office.com/en-us/article/test-your-document-s-readability-85b4969e-e80a-4777-8dd3-f7fc3c8b3fd2>

An example of where the F-K test in Microsoft Word will appear is attached.

The screenshot shows a Microsoft Word document with the following text:

So I lived my life alone, without anyone that I could really talk to, until I had an accident with my plane in the Desert of Sahara, six years ago. Something was broken in my engine. And as I had with me neither a mechanic nor any passengers, I set myself to attempt the difficult repairs all alone. It was a question of life or death for me: I had scarcely enough drinking water to last a week.

The first night, then, I went to sleep on the sand, a thousand miles from any human habitation. I was more isolated than a shipwrecked sailor on a raft in the middle of the ocean. Thus you can imagine my amazement, at sunrise, when I was awakened by an odd little voice. It said:

"If you please--draw me a sheep!"

"What!"

"Draw me a sheep!"

I jumped to my feet, completely thunderstruck. I blinked my eyes hard. I looked carefully all around me. And I saw a most extraordinary small person, who stood there examining me with great seriousness. Here you may see the best portrait that, later, I was able to make of him. But my drawing is certainly very much less charming than its model.

The 'Readability Statistics' dialog box shows the following data:

| Readability Statistics | |
|----------------------------|------|
| Counts | |
| Words | 205 |
| Characters | 878 |
| Paragraphs | 6 |
| Sentences | 16 |
| Averages | |
| Sentences per Paragraph | 3.2 |
| Words per Sentence | 12.6 |
| Characters per Word | 4.1 |
| Readability | |
| Flesch Reading Ease | 73.5 |
| Flesch-Kincaid Grade Level | 6.1 |
| Passive Sentences | 0.0% |

Indicate what paragraph of text you will be analysing here. _____

Using the website, what is the SMOG reading grade of the text in the app you analysed?

- 5th grade or under
- 6th grade
- 7th grade
- 8th grade
- 9th grade
- 10th grade or over

Using the website, what is the F-K reading grade of the text in the app you analysed?

- 5th grade or under
- 6th grade
- 7th grade
- 8th grade
- 9th grade
- 10th grade or over

Using Microsoft Word, what is the F-K reading grade of the text in the app you analysed?

- 5th grade or under
- 6th grade
- 7th grade
- 8th grade
- 9th grade
- 10th grade or over