Appendix A. Literature Search Strategies

Search #1

1. follow-up studies/
2. follow-up.tw.
3. exp Case-Control Studies/
4. case-control.tw.
5. exp Longitudinal Studies/
6. longitudinal.tw.
7. exp Cohort Studies/
8. cohort.tw.
9. (random$ or rct).tw.
10. exp Randomized Controlled Trials/
11. exp random allocation/
12. exp Double-Blind Method/
13. exp Single-Blind Method/
14. randomized controlled trial.pt.
15. clinical trial.pt.
16. (clin$ adj trial$).tw.
17. ((singl$ or doubl$ or trebl$ or tripl$) adj (blind$ or mask$)).tw.
18. exp PLACEBOS/
19. placebo$.tw.
20. exp Research Design/
21. Comparative Study/
22. exp Evaluation Studies/
23. exp Prospective Studies/
24. 1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9 or 10 or 11 or 12 or 13 or 14 or 15 or 16 or 17 or 18 or 19 or 20 or 21 or 22 or 23
25. disab$.af.
26. limitation$.af.
27. handicap$.af.
28. impair$.af.
29. 25 or 26 or 27 or 28
30. exp growth disorders/ or failure to thrive/
31. exp Nutrition Disorders/
32. failure to thrive.af.
33. 30 or 31
34. 24 and 29 and 33
35. limit 34 to human
36. limit 35 to english language
37. limit 36 to (newborn infant or infant <1 to 23 months> or preschool child <2 to 5 years> or child <6 to 12 years> or adolescence <13 to 18 years>)
38. 36 not 37
39. limit 38 to (adult <19 to 44 years> or middle age <45 to 64 years> or "aged <65 and over>"

or "aged, <80 and over>")
40. 36 not 39
41. 24 and 32
42. limit 41 to (newborn infant or infant <1 to 23 months> or preschool child <2 to 5 years> or child <6 to 12 years> or adolescence <13 to 18 years>)
43. 41 not 42
44. limit 43 to (adult <19 to 44 years> or middle age <45 to 64 years> or "aged <65 and over>" or "aged, <80 and over>")
45. 41 not 44
46. limit 45 to human
47. limit 46 to english language
48. 40 not 47
49. 47 or 48
50. exp Body Weight/
51. 24 and 29 and 50
52. limit 51 to human
53. limit 52 to (newborn infant or infant <1 to 23 months> or preschool child <2 to 5 years> or child <6 to 12 years> or adolescence <13 to 18 years>)
54. 52 not 53
55. limit 54 to (adult <19 to 44 years> or middle age <45 to 64 years> or "aged <65 and over>" or "aged, <80 and over>")
56. 52 not 55
57. limit 56 to english language
58. 49 or 57

Search #2

1. exp Failure to thrive/
2. exp Infant nutrition disorders/
3. exp Nutrition disorders/
4. exp failure to thrive/ or exp growth/
5. exp Growth/
6. exp Growth disorders/
7. exp Nutrition disorders/
8. exp Protein-energy malnutrition/
9. exp Child nutrition disorders/
10. exp Child nutrition/
11. exp Infant nutrition disorders/
12. exp Body weight/
13. exp Growth/
14. exp Protein-energy malnutrition/
15. exp Growth disorders/
16. exp Body height/
17. exp Dwarfism, pituitary/
18. exp Dwarfism, pituitary/

19. exp Psychosocial deprivation/
20. exp Dwarfism/
21. exp Stress, psychological/
22. exp Stress, psychological/
23. exp Psychophysiologic disorders/
24. exp Hyperphagia/
25. exp Child behavior/
26. exp Child abuse/
27. FAILURE TO THRIVE.mp.
28. childhood malnutriton.mp. [mp=title, abstract, registry number word, mesh subject heading]
29. failure to thrive.mp. [mp=title, abstract, registry number word, mesh subject heading]
30. protein energy malnutrition.mp. [mp=title, abstract, registry number word, mesh subject heading]
31. growht failure.mp. [mp=title, abstract, registry number word, mesh subject heading]
32. growth failure.mp. [mp=title, abstract, registry number word, mesh subject heading]
33. failure to grow.mp. [mp=title, abstract, registry number word, mesh subject heading]
34. pshchosocial dwarfism.mp. [mp=title, abstract, registry number word, mesh subject heading]
35. psychosocial dwarfism.mp. [mp=title, abstract, registry number word, mesh subject heading]
36. hyperphagic short stature.mp. [mp=title, abstract, registry number word, mesh subject heading]
37. childhood neglect.mp. [mp=title, abstract, registry number word, mesh subject heading]
38. childhood neglect.mp. [mp=title, abstract, registry number word, mesh subject heading]

Search #3

1 thriv$.af.
2 follow-up studies/
3 follow-up.tw.
4 exp Case-Control Studies/
5 case-control.tw.
6 exp Longitudinal Studies/
7 longitudinal.tw.
8 exp Cohort Studies/
9 cohort.tw.
10 (random$ or rct).tw.
11 exp Randomized Controlled Trials/
12 exp random allocation/
13 exp Double-Blind Method/
14 exp Single-Blind Method/
15 randomized controlled trial.pt.
16 clinical trial.pt.
17 (clin$ adj trial$).tw.
18 ((singl$ or doubl$ or trebl$ or tripl$) adj (blind$ or mask$)).tw.
19 exp PLACEBOS/
20 placebo$.tw.

21 exp Research Design/
22 Comparative Study/
23 exp Evaluation Studies/
24 exp Prospective Studies/
25 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9 or 10 or 11 or 12 or 13 or 14 or 15 or 16 or 17 or 18 or 19 or 20 or 21 or 22 or 23 or 24
26 1 and 25
27 limit 26 to human
28 limit 27 to english language

Appendix B. Data Abstraction Form

FAILURE TO THRIVE Association with Disability

Instructions: Check or fill-in where appropriate. Only one answer except where indicated by an *

Reviewer: **Review date**: / / **First author**: **Year**: **UI**:

Is there a Non-FTT comparison group? ☐ Yes ☐ No **IF NOT, DO NOT DATA EXTRACT!**
Other reason(s) for rejection (no data reported, wrong population, etc)**:**

STUDY CHARACTERISTICS
***Name of Country(s):** _____ ☐ Developed ☐ Developing ☐ ND
Number of Sites: _____ ☐ ND
Study setting during recruitment :** _____Study setting at follow-up:**

Duration of Study: ☐ ND _____ to _____ Other
Funding source: ☐ Government ☐ Pharmaceutical ☐ Private ☐ Hospital ☐ ND

METHODS
Study Design: (CHOOSE ONE): ☐ Longitudinal ☐ Cross-sectional
(CHOOSE ONE): ☐ Prospective ☐ Retrospective ☐ Unclear
(CHOOSE ONE-(PI'S INTENTION)): ☐ RCT ☐ Cross-over ☐ Case-Control ☐ Other _____
Definition (or categories) of Failure to Thrive (as defined by authors): ☐ ND

STUDY POPULATION
Inclusion criteria for FTT:
_____Inclusion criteria for Control:
_____Exclusion criteria for FTT:

Exclusion criteria for Control:

Total number of subjects enrolled - FTT _____ Control _____ ☐ ND
If longitudinal study - # follow-up visits: _____ Follow-up intervals:
Number of subjects evaluated (Final sample size) - FTT _____ Control _____ ☐ ND
Number of subjects who died prior to evaluation - FTT _____ Control _____ ☐ ND
Other reasons for withdrawals/non-participation (by group):
Applicability to question of interest:
How representative was FTT study population to the US FTT population? ☐ Excellent ☐ Good ☐ Fair ☐ Poor

Appendix B. Data Abstraction Form

Appendix B. Data Abstraction Form (continued)

DEMOGRAPHICS OF INITIAL POPULATION (if no data – write ND in the box)

Brief Description of groups ? Circle mean or median ?	**Group 1** (eg. FTT tx)	**Group 2** (eg. FTT placebo)	**Group 3**	**Group 4 Non FTT** (eg. Control)
Sample size evaluated				
Mean/median age at entry (range)				
Mean/median weight for age				
Mean/median ht/ length				
Race- Incl # eg. 5 bk 10 wh 7 asian 2 Nat Amer				
# Males				
Maternal educ level (range)				
Income level (range)				
Health insur type				

Additional SES:

Appendix B. Data Abstraction Form (continued)

***VARIABLES (predictors or outcome) WITH DISABILITY EXAMINED – Fill in 1st column (Variables) with codes listed below**

1 – PERINATAL	2 – DEMOGRAPHIC	3 – ANTHROPOMETRIC	4 - ORGANIC ILLNESS	5 – DEVELOPMENTAL MARKERS
a. tobacco	a. education	a. weight	a. congenital h. Immunologic	a. Cognitive development
b. alcohol	b. income	b. weight for age	b. pulmonary i. Infectious	b. Behavioral disorder
c. cocaine	c. health coverage	c. height	d. cardiovascular j. endocrine (incl precocious puberty)	c. ADHD
d. infection	d. maternal IQ	d. height for age	e. gastrointestinal k. other	d. Learning disability
e. prematurity	e. quality of HOME Envirmnt	e. head circumference	f. renal	e. Speech/lang/communication disorder
f. LBW	f. age	f. wt for ht	g. neurological (incl oral-motor dysf)	f. Activities of daily living
g. other	g. gender	g. other		g. School performance
	i. other			h. other

Appendix B. Data Abstraction Form (continued)

Variables (outcome or predictors)	**Time to f/u**	**N** (total # eval by Gp)	**Measurement tool** (eg. Child Behavior Checklist)	**Statistical methods**	**Tool appro-priate?**	**Criteria / cut-point** (text description and/or cut-point value for test ⊕ or test T)	**Outcome values/measures** (by Gp)	**Results** (incl p-value)
eg. 2g (maternal edu)	NA	FTT-19 Cntl-19	Questionnaire	One-tail t test	Y	NA	FTT – 11 yr (SD = 2) Control – 12 yr (SD = 1)	There was a difference between the two groups in maternal educ. ($p < 0.05$)

Appendix B. Data Abstraction Form (continued)

Other findings/Results/Conclusions of interest:

BIAS/LIMITATIONS

Eligibility criteria: ☐ Explicit & appropriate ☐ No

Sample size: ☐ Sufficient ☐ Small

Funding source: ☐ Not of concern ☐ Of concern ☐ No data

Dropout rate/reasons: ☐ Not of concern ☐ Of concern ☐ No data

Predictors & outcomes: ☐ Relevant ☐ Not relevant

Follow-up duration: ☐ Adequate ☐ Inadequate ☐ Cross-sectional

Methodology: ☐ Adequate ☐ Inadequate ☐ Unsure

Statistical analysis: ☐ Adequate ☐ Inadequate ☐ Unsure

Control group: ☐ Appropriate ☐ Inappropriate ☐ No control group

Sample representative of inclusion criteria: ☐ Yes ☐ No

Post hoc analyses: ☐ All ☐ Some ☐ None ☐ Unsure

Other:

Internal Validity (Quality of Methods)

☐ **A** Prospective (Not Retrospective). Complete reporting of methods and results (incl. inclusion/exclusion criteria, "Table 1 data,") proper reference ("gold") standard, correct analyses performed (No data inconsistency and discrepancy).

☐ **B** Prospective or Retrospective. Not all criteria of A. Some deficiencies, however, unlikely to cause major bias

☐ **C** Prospective or Retrospective. Significant design or reporting errors, large amount of missing information or bias. No reference standard provided or use of inappropriate reference standard.

If B or C: **Deficiency:**

Study Summary – (A brief paragraph for the Results section of the report including the basic methodology, population, outcomes, stats & results and biases)

Appendix C. Acknowledgments

The Evidence-based Practice Center staff acknowledges the collaboration of the clinical experts who served on the EPC Technical Expert Panel. The EPC also acknowledges the contributions by those who acted as peer reviewers for the evidence report.

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Appendix D: Acronyms/Abbreviations

ADHD	Attention deficit hyperactivity disorders
ADL	Activities of daily living
AFDC	Aid to Families with Dependent Children
AGA	appropriate for gestational age
ALRI	acute lower respiratory infections
ANCOVA	analyses of covariance
ARI	acute respiratory infections
BGS	Boston Growth Standard
BMI	body mass index
CBCL	Child Behavior Checklist
Ctrl	control
D	day(s)
D/C	discharge
FU	follow-up
FVC	forced vital capacity
GCI	general cognitive index
GA	gestational age
Gp	group
HC	head circumference
HOME	Home Observation for Measurement of the Environment
HR	heart rate
HS	high school
Ht	height
Hx	history
Incr	increase(d)
LBW	low birth weight
LOMDS	Lincoln-Oseretsky motor development scale
MANCOVA	multivariate of analyses of covariance
Mo	month(s)
MDI	mental development index
ND	no data
Nl	normal
NOFTT	non-organic failure to thrive
NS	not significant
NCHS	National Center for Health Statistics
Nonsignf	nonsignificant
OFTT	organic failure to thrive
PCERA	Parent-Child Early Relational Assessment scale
PCM	protein-calorie malnutrition
PDI	psychomotor development index
PEM	protein-energy malnutrition
PHA	phytohemagglutinin
PPVT	Peabody Picture Vocabulary Test

RFC	rosette forming cells
RR	relative risk
SD	standard deviation
SDS	standard deviation score
SES	social-economic status
SGA	small for gestational age
Signf	significant
SK-SD	streptokinase-streptodornase
Std	standard
SOMA	Schedule for Oral Motor Assessment
SWFA	standard weight for age
THE	tetrahydrocortisol
THF	tetrahydrocortisone
TRIB	Tester's Rating of Infant Behaviour
UI	Medline unique indentifer
WAIS	Wechsler Adult Intelligence Scale
WD	withdrawn
WPPSI / WPPSI-R	Wechsler Pre-school and Primary Scale of Intelligence
WISC	Wechsler Intelligence Scale for Children
WORD test	Wechsler Objective Reading Dimensions manual
Wt	weight