

## INFORMATION ABOUT THE FATIGUE SYMPTOM INVENTORY (FSI) AND THE MULTIDIMENSIONAL FATIGUE SYMPTOM INVENTORY (MFSI)

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The **Fatigue Symptom Inventory (FSI)**, is a 14-item self-report measure designed to assess the severity, frequency, and daily pattern of fatigue as well as its perceived interference with quality of life. Severity is measured on separate 11-point scales (0=not at all fatigued; 10=as fatigued as I could be) that assess most, least, and average fatigue in the past week as well as current fatigue. Frequency is measured as the number of days in the past week (0-7) that respondents felt fatigued as well as the extent of each day on average they felt fatigued (0=none of the day; 10=the entire day). Perceived interference is measured on separate 11-point scales (0=no interference; 10=extreme interference) that assess the degree to which fatigue in the past week was judged to interfere with general level of activity, ability to bathe and dress, normal work activity, ability to concentrate, relations with others, enjoyment of life, and mood. These interference ratings can be summed to obtain a total perceived interference score. The final item provides qualitative information about possible diurnal variation in the daily experience of fatigue. Additional information about the FSI can be found in:

Hann, D. M., Jacobsen, P. B., Azzarello, L. M., Martin, S. C., Curran, S. L., Fields, K. K., Greenberg, H., & Lyman, G. (1998). Measurement of fatigue in cancer patients: Development and validation of the Fatigue Symptom Inventory. *Quality of Life Research*, 7, 301-310.

Hann, D. M., Denniston, M. M., & Baker, F. (2000). Measurement of fatigue in cancer patients: Further validation of the Fatigue Symptom Inventory. *Quality of Life Research*, 9, 847-854.

The **Multidimensional Fatigue Symptom Inventory (MFSI)**, is an 83-item self-report measure designed to assess the principal manifestations of fatigue. Items are rated on a 5-point scale indicating how true each statement was for the respondent during the last week (0=not at all; 4=extremely). The MFSI consists of both rationally and empirically derived subscales. The rationally derived subscales, which were developed on the basis of expert assignment to categories, are designed to assess global, somatic, affective, cognitive, and behavioral manifestations of fatigue. The empirically derived subscales, which were developed using factor analysis, are considered to assess general, physical, emotional, and mental manifestations of fatigue as well as vigor, an estimate of the patient's energy level. Additional information about the MFSI can be found in:

Stein, K. D., Martin, S. C., Hann, D. M., & Jacobsen, P. B. (1998). A multidimensional measure of fatigue for use with cancer patients. *Cancer Practice*, 6, 143-152.

The **Multidimensional Fatigue Symptom Inventory- Short Form (MFSI-SF)** is a 30-item short form of the MFSI that yield scores only for the empirically derived subscales. Preliminary research suggests that it has acceptable psychometric properties and may be used as a substitute for the MFSI when time constraints and scale length are of concern. Additional information about the MFSI-SF can be found in:

Stein, K. D., Jacobsen, P. B., Blanchard, C. M., Thors, C. T. (2004). Further validation of the Multidimensional Fatigue Symptom Inventory-Short Form (MFSI-SF). *Journal of Pain and Symptom Management*, 27, 14-23.

## ADMINISTRATION AND SCORING

The FSI, the MFSI, and the MFSI-SF are self-report instruments that can be completed in a wide variety of settings. The FSI and MFSI-SF each take about 5 minutes to complete; the MFSI takes about 10 minutes to complete.

### FSI Scoring

Each item on the FSI can be scored as an individual scale, providing information about that variable. Furthermore, a total Disruption Index can be computed by summing items 5 - 11. Item 14 provides qualitative information only and is not intended to be used as a quantitative scale.

### MFSI Scoring

The MFSI can be scored for both the rationally derived and empirically derived scales. Higher scores indicate more fatigue.

The scoring for the rationally derived scales is as follows:

- 1) Global scale = sum of items 26, 35, 43, 45, 52, 54, 60, 62, 70\*, 71, 78 / 11
- 2) Somatic scale = sum of items 1,4,9,12,14,16,18,20,25,27,37,38,42,48,51,57,68,73,74,79, 82 / 21
- 3) Affective scale = sum of items 5, 11, 21\*, 23, 28, 29, 30, 33, 49, 50, 53, 59, 65, 66, 76, 81\*, 83 / 17
- 4) Behavioral scale = sum of items 6, 8, 13, 15, 34, 40, 44 / 7
- 5) Cognitive scale = sum of items 3, 7, 31, 36, 39\*, 46, 56, 58, 63, 64, 69\*, 72, 77, 80 / 14

**\* ITEMS ARE REVERSED SCORED**

The scoring for the empirically derived scales is as follows:

- 1) General scale = sum of items 35, 43, 45, 47, 54, and 78
- 2) Physical scale = sum of items 14, 16, 18, 48, 57, and 75
- 3) Emotional scale = sum of items 29, 30, 53, 59, 65, and 83
- 4) Mental scale = sum of items 7, 36, 46, 58, 72, and 77
- 5) Vigor scale = sum of items 21, 22, 32, 67, 70, and 81

### MFSI-SF Scoring

- 1) General scale = sum of items 10, 12, 14, 17, 18, and 28
- 2) Physical scale = sum of items 2, 4, 6, 16, 19, and 26
- 3) Emotional scale = sum of items 3, 8, 13, 21, 23, and 30
- 4) Mental scale = sum of items 1, 11, 15, 20, 25, and 27
- 5) Vigor scale = sum of items 5, 7, 9, 22, 24, and 29
- 6) Total score = (General + Physical + Emotional + Mental) - Vigor

## PUBLICATIONS REFERRING TO FSI, MFSI, OR MFSI-SF

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# FSI

For each of the following, circle the one number that best indicates how that item applies to you.

1. Rate your level of fatigue on the day you felt **most** fatigued during the past week:

0 1 2 3 4 5 6 7 8 9 10  
Not at all As fatigued  
fatigued as I could be

2. Rate your level of fatigue on the day you felt **least** fatigued during the past week:

0 1 2 3 4 5 6 7 8 9 10  
Not at all As fatigued  
fatigued as I could be

3. Rate your level of fatigue on the **average** during the past week:

0 1 2 3 4 5 6 7 8 9 10  
Not at all As fatigued  
fatigued as I could be

4. Rate your level of fatigue **right now**:

0 1 2 3 4 5 6 7 8 9 10  
Not at all As fatigued  
fatigued as I could be

5. Rate how much, in the past week, fatigue interfered with your **general level of activity**:

0 1 2 3 4 5 6 7 8 9 10  
No Extreme  
interference interference

6. Rate how much, in the past week, fatigue interfered with your **ability to bathe and dress yourself**:

0 1 2 3 4 5 6 7 8 9 10  
No Extreme  
interference interference

7. Rate how much, in the past week, fatigue interfered with your **normal work activity (includes both work outside the home and housework)**:

0 1 2 3 4 5 6 7 8 9 10  
No Extreme  
interference interference



## MFSI

Below is a list of statements that describe how people sometimes feel. Please read each item carefully, then circle the one number next to each item which best describes **how true each statement has been for you in the past 7 days.**

	Not at all	A little	Moderately	Quite a bit	Extremely
1. My glands are swollen.....	0	1	2	3	4
2. I am not interested in sex.....	0	1	2	3	4
3. I am bewildered.....	0	1	2	3	4
4. I have pain in my chest.....	0	1	2	3	4
5. I feel frustrated.....	0	1	2	3	4
6. I am clumsy.....	0	1	2	3	4
7. I have trouble remembering things.....	0	1	2	3	4
8. I limit my social activity.....	0	1	2	3	4
9. My neck is tender.....	0	1	2	3	4
10. I have trouble talking with others.....	0	1	2	3	4
11. I feel irritable.....	0	1	2	3	4
12. My shoulders are stiff.....	0	1	2	3	4
13. I have trouble finishing things.....	0	1	2	3	4
14. My muscles ache.....	0	1	2	3	4
15. I have trouble doing simple tasks.....	0	1	2	3	4
16. My head feels heavy.....	0	1	2	3	4
17. I have trouble sitting up.....	0	1	2	3	4
18. My legs feel weak.....	0	1	2	3	4
19. I sleep during the day.....	0	1	2	3	4
20. I am short of breath.....	0	1	2	3	4
21. I feel cheerful.....	0	1	2	3	4
22. I feel lively.....	0	1	2	3	4
23. I feel angry.....	0	1	2	3	4
24. I feel washed out.....	0	1	2	3	4
25. I feel feverish.....	0	1	2	3	4

	Not at all	A little	Moderately	Quite a bit	Extremely
26. I feel wiped out .....	0	1	2	3	4
27. I have trouble walking .....	0	1	2	3	4
28. I feel bored .....	0	1	2	3	4
29. I feel upset.....	0	1	2	3	4
30. I feel nervous .....	0	1	2	3	4
31. I feel foggy.....	0	1	2	3	4
32. I feel relaxed .....	0	1	2	3	4
33. I feel impatient.....	0	1	2	3	4
34. I rest often .....	0	1	2	3	4
35. I feel pooped .....	0	1	2	3	4
36. I am confused.....	0	1	2	3	4
37. I am sleepy .....	0	1	2	3	4
38. I feel weak all over.....	0	1	2	3	4
39. I am able to stay focused.....	0	1	2	3	4
40. I need help doing my usual activities.....	0	1	2	3	4
41. I feel drained .....	0	1	2	3	4
42. I feel dizzy .....	0	1	2	3	4
43. I am worn out.....	0	1	2	3	4
44. I have trouble starting things .....	0	1	2	3	4
45. I feel sluggish.....	0	1	2	3	4
46. I have trouble paying attention .....	0	1	2	3	4
47. I feel fatigued.....	0	1	2	3	4
48. My arms feel weak.....	0	1	2	3	4
49. I feel embarrassed .....	0	1	2	3	4
50. I feel discouraged.....	0	1	2	3	4
51. My eyes hurt .....	0	1	2	3	4
52. I feel slowed down.....	0	1	2	3	4
53. I feel sad.....	0	1	2	3	4
54. I feel run down.....	0	1	2	3	4
55. I feel listless .....	0	1	2	3	4



	Not at all	A Little	Moderately	Quite a bit	Extremely
56. I am uncertain about things.....	0	1	2	3	4
57. I ache all over.....	0	1	2	3	4
58. I am unable to concentrate.....	0	1	2	3	4
59. I feel depressed.....	0	1	2	3	4
60. I have no energy.....	0	1	2	3	4
61. I feel drowsy.....	0	1	2	3	4
62. I am weary.....	0	1	2	3	4
63. I feel muddled.....	0	1	2	3	4
64. I have trouble reading.....	0	1	2	3	4
65. I feel tense.....	0	1	2	3	4
66. I feel guilty.....	0	1	2	3	4
67. I feel refreshed.....	0	1	2	3	4
68. I have trouble standing.....	0	1	2	3	4
69. I am alert.....	0	1	2	3	4
70. I feel energetic.....	0	1	2	3	4
71. I feel exhausted.....	0	1	2	3	4
72. I make more mistakes than usual.....	0	1	2	3	4
73. My mouth is dry.....	0	1	2	3	4
74. I have chills.....	0	1	2	3	4
75. My body feels heavy all over.....	0	1	2	3	4
76. I yell at others.....	0	1	2	3	4
77. I am forgetful.....	0	1	2	3	4
78. I feel tired.....	0	1	2	3	4
79. My head aches.....	0	1	2	3	4
80. I am unable to think clearly.....	0	1	2	3	4
81. I feel calm.....	0	1	2	3	4
82. I feel lightheaded.....	0	1	2	3	4
83. I am distressed.....	0	1	2	3	4

## MFSI-SF

Below is a list of statements that describe how people sometimes feel. Please read each item carefully, then circle the one number next to each item which best describes **how true each statement has been for you in the past 7 days.**

	Not at all	A little	Moderately	Quite a bit	Extremely
1. I have trouble remembering things .....	0	1	2	3	4
2. My muscles ache.....	0	1	2	3	4
3. I feel upset.....	0	1	2	3	4
4. My legs feel weak .....	0	1	2	3	4
5. I feel cheerful .....	0	1	2	3	4
6. My head feels heavy .....	0	1	2	3	4
7. I feel lively .....	0	1	2	3	4
8. I feel nervous .....	0	1	2	3	4
9. I feel relaxed .....	0	1	2	3	4
10. I feel pooped .....	0	1	2	3	4
11. I am confused.....	0	1	2	3	4
12. I am worn out.....	0	1	2	3	4
13. I feel sad.....	0	1	2	3	4
14. I feel fatigued .....	0	1	2	3	4
15. I have trouble paying attention .....	0	1	2	3	4
16. My arms feel weak.....	0	1	2	3	4
17. I feel sluggish.....	0	1	2	3	4
18. I feel run down.....	0	1	2	3	4
19. I ache all over.....	0	1	2	3	4
20. I am unable to concentrate .....	0	1	2	3	4
21. I feel depressed .....	0	1	2	3	4
22. I feel refreshed .....	0	1	2	3	4
23. I feel tense .....	0	1	2	3	4
24. I feel energetic .....	0	1	2	3	4
25. I make more mistakes than usual .....	0	1	2	3	4
26. My body feels heavy all over .....	0	1	2	3	4
27. I am forgetful .....	0	1	2	3	4
28. I feel tired.....	0	1	2	3	4
29. I feel calm .....	0	1	2	3	4
30. I am distressed .....	0	1	2	3	4