

Subject's IMACS Number \_\_\_\_\_ Date of Assessment \_\_\_\_\_ Assessment number \_\_\_\_\_  
 Assessor \_\_\_\_\_ Time \_\_\_\_\_ **Dominant limb - UE \_\_ LE \_\_**

## FUNCTIONAL INDEX 3

**Borg CR-10**

Muscle Group		Metronome (beats/min)	Repetitions	% / max repetitions	Muscle Exertion
<b>Shoulder flexion</b> (1 kg weight cuff) Repetitions: 0 - 60	Right	40			
	Left	40			
<b>Head lift</b> Repetitions: 0 - 30		40			
<b>Hip flexion</b> Repetitions: 0 - 60	Right	40			
	Left	40			

Limitations in performing the test	Shoulder flexion		Head Lift	Hip Flexion	
	Right	Left		Right	Left
Limitation of Active ROM	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Limitation of Passive ROM	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Used alternate test position	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Subject fatigued with testing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Poor effort	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other (Specify)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### Comments on performance of the Functional Index 3 Test

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#### Formula for Total Score:

- 1- (Performed repetitions of shoulder flexion of dominant side + 2 × neck flexion repetitions + hip flexion on dominant side) / 180

OR

- 2- (% of maximal repetitions of shoulder flexion of dominant side + % of maximal repetitions of neck flexion + % of maximal repetitions of hip flexion on dominant side) / 3

## Short Manual

### Instruction to Patient:

- Perform as many repetitions of each muscle group task as you can or stop when reaching maximal number of repetitions. However, you decide when to stop due to muscle fatigue, pain or general fatigue.

### Instructions to Observer:

- Numbers of correct performed repetitions following five learning repetitions are registered for each task.
- If passive ROM is normal, but active ROM is limited the score is 0. Do not perform the task. If passive ROM equals active ROM perform the task within actual ROM.
- Each task is stopped if: a) the patient cannot keep up the given pace and is unable to correct within three repetitions, b) the patient starts to compensate and is unable to correct within three repetitions. After completing each task, the patient is instructed to rate perceived muscular exertion on the Borg CR-10 scale from 0-10 (0=no exertion, 10=maximal exertion).
- A metronome is used to standardize the movement pace of each task. A pace of 40 beats / minute results in 20 repetitions per Minute.
- The test should be scored using the dominant side. However, if the dominant side has a limitation, the other side should be used in the scoring.
- If one muscle group is omitted in the testing, please use the second scoring method, which is based on the percentage of maximal repetitions.

## References

1. Ernste FC, Chong C, Crowson CS, Kermani TA, Mhuircheartaigh ON, Alexanderson H. Functional Index-3: A Valid and Reliable Functional Outcome Assessment Measure in Patients With Dermatomyositis and Polymyositis. J Rheumatol. 2021 Jan 1;48(1):94-100. doi: 10.3899/jrheum.191374. Epub 2020 Apr 15. PMID: 32295854; PMCID: PMC7572829.
2. Alexanderson H, Broman L, Tollbäck A, Josefson A, Lundberg IE, Stenström CH. Functional index-2: Validity and reliability of a disease-specific measure of impairment in patients with polymyositis and dermatomyositis. Arthritis Rheum. 2006 Feb 15;55(1):114-22. doi: 10.1002/art.21715. PMID: 16463422.
3. Borg GA. Psychophysical bases of perceived exertion. Med Sci Sports Exerc. 1982;14(5):377-81. PMID: 7154893.