

Multi-Ethnic Study of Atherosclerosis**CASI***Cognitive Abilities Screening Instrument***Participant Id#:** **Acrostic:** **Tech ID#:** **Date:**

Month

Day

Year

Testing start time:
(hr:min)

“在下面的問題，我們將對你做一個簡單的記憶力測驗。隨著人們年齡的增加，有些輕微的記憶問題是普遍的，並且也是年紀變大的正常現象。我將提問的有些問題非常簡單，甚至看起來有些愚蠢。有些問題非常難，沒有人會全部答對，我會問你所有的問題，請盡你所能來回答。”

1. 你在哪裡出生？

城市／縣鎮

☐ 1 Correct☐ 0 Error/Refused☐ 9 Not Att/Disabled**CITY/TOWN OF BIRTH (from previous records):** _____

州省／國家

☐ 1 Correct☐ 0 Error/Refused☐ 9 Not Att/Disabled

2. 你是什麼時候出生的？

年

☐ 2 Correct☐ 1 Missed by 1-3 years☐ 0 Missed by > 3 years☐ 9 Not Att/Disabled

日

☐ 1 Correct☐ 0 Error/Refused☐ 9 Not Att/Disabled

月

☐ 1 Correct☐ 0 Error/Refused☐ 9 Not Att/Disabled**DATE OF BIRTH (from previous records):** ____/____/____

3. 你有多大年紀？

☐ 2 Correct☐ 1 Missed by 1-3 years☐ 0 Missed by > 3 years☐ 9 Not Att/Disabled**AGE (from previous records):** ____ years (as of today's date).

4a. 一小時有多少分鐘或一年有多少天？ (score 2 if either question answered correctly)

☐ 2 Correct → Skip 4b☐ 0 Error/Refused → Continue with 4b☐ 9 Not Att/Disabled

b. 一小時有多少分鐘或一年有多少天？

☐ 2 Correct☐ 0 Error/Refused☐ 9 Not Att/Disabled

5. 太陽朝哪個方向落下？ (if confused, may provide 4 choices)

NOTE If the participant seems confused provide the four choices "north, south, east, west". If the participant points, ask, 那是北, 南, 東或西？

☐ 2 Correct ☐ 0 Error/Refused ☐ 9 Not Att/Disabled

6. 我 ▯ 三個詞要你記住。我 ▯ 了這三個詞後請重複它們 Repeat them after I have said all three

	<u>Correct</u>	<u>Error/ Refused</u>	<u>Not Att/Disabled</u>
鞋	<input type="radio"/> 1	<input type="radio"/> 0	<input type="radio"/> 9
藍色	<input type="radio"/> 1	<input type="radio"/> 0	<input type="radio"/> 9
慈善	<input type="radio"/> 1	<input type="radio"/> 0	<input type="radio"/> 9

NOTE If participant can't answer the first time, elaborate and repeat up to a total of 3 times. Score last performance.

“讓我再說一遍三個詞，它們是...鞋-是用來穿的，藍是一種顏色，和慈善一種好的個人品德。現在請再 ▯ 一遍這三個詞。

7. 我要 ▯ 一些數字，你要倒敘我所 ▯ 的。例如，如果我 ▯ 1-2，你就 ▯ 2-1，好嗎？記住，你要倒敘我所 ▯ 的

	<u>Correct</u>	<u>Error/ Refused</u>	<u>Not Att/Disabled</u>
a. 1-2-3 (If unable, coach for 3-2-1, but score 0):	<input type="radio"/> 1	<input type="radio"/> 0	<input type="radio"/> 9
b. 6-8-2 (If score is 0 in both A and B, score C 0)	<input type="radio"/> 2	<input type="radio"/> 0	<input type="radio"/> 9
c. 3-5-2-9	<input type="radio"/> 2	<input type="radio"/> 0	<input type="radio"/> 9

8. 我早先要你記住的三個詞是什麼？

a. 鞋

1.5 ☐ Spontaneous recall

1 ☐ After: "一個詞是指穿的東西

.5 ☐ After: 它是鞋子，襯衫，還是襪子？

0 ☐ Still incorrect

9 ☐ Not attempted/disabled

b. 藍色

1.5 ☐ Spontaneous recall

1 ☐ After: 一個詞是指顏色

.5 ☐ After: 它是藍色，黑色，還是棕色？

0 ☐ Still incorrect

9 ☐ Not attempted/disabled

c. 慈善

1.5 ☐ Spontaneous recall

1 ☐ After: 一個詞是指好的人品

.5 ☐ After: 它是忠誠，善良，還是謙 ▯ ？

0 ☐ Still incorrect

9 ☐ Not attempted/disabled

NOTE Unless recall is perfect, give another reminder of the 3 words.

“接下來我要你做一些精神減法”。

NOTE For the first error only, score 0, but provide the correct answer. If subject asks examiner to repeat answer from previous step, provide the answer but score 0 at that step Discontinue after 2 consecutive 0's for any reason and score the remaining steps as 0.

		Correct	Error/ Refused	Not Att/Disabled
9a. 100減去3等於多少？(97)	<input type="text"/> <input type="text"/>	<input type="radio"/> 1	<input type="radio"/> 0	<input type="radio"/> 9
b. 從上面的結果再減去3等於多少？(94)	<input type="text"/> <input type="text"/>	<input type="radio"/> 1	<input type="radio"/> 0	<input type="radio"/> 9
(If A and B are both scored 0, score C 0)				
c. Repeat 從上面的結果再減去3等於多少？(91)	<input type="text"/> <input type="text"/>	<input type="radio"/> 1	<input type="radio"/> 0	<input type="radio"/> 9
(ask 3 more times)	(88) <input type="text"/> <input type="text"/>	<input type="radio"/> 1	<input type="radio"/> 0	<input type="radio"/> 9
	(85) <input type="text"/> <input type="text"/>	<input type="radio"/> 1	<input type="radio"/> 0	<input type="radio"/> 9

10. 今天是几號？

<input type="text"/> <input type="text"/>	/	<input type="text"/> <input type="text"/>	/	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
month		day		year

TODAY'S DATE: ____/____/____

- | | | |
|---|--|--|
| a. Year | b. Month | c. Date |
| 4 <input type="radio"/> Accurate | 2 <input type="radio"/> Accurate or within 5 days | 3 <input type="radio"/> Accurate (of the month) |
| 2 <input type="radio"/> Missed by 1 year | 1 <input type="radio"/> Missed by 1 month | 2 <input type="radio"/> Missed 1 or 2 days |
| 1 <input type="radio"/> Missed by 2-5 years | 0 <input type="radio"/> Missed by 2 or more months | 1 <input type="radio"/> Missed by 3-5 days |
| 0 <input type="radio"/> Missed by 6 or more years | 9 <input type="radio"/> Not attempted/disabled | 0 <input type="radio"/> Missed by 6 or more days |
| 9 <input type="radio"/> Not attempted/disabled | | 9 <input type="radio"/> Not attempted/disabled |

11. 今天是星期几？ ☐ 1 Correct ☐ 0 Error/Refused ☐ 9 Not Att/Disabled

DAY OF THE WEEK: _____

12. 現在是什麼季節？ ☐ 1 Accurate within 1 month ☐ 0 Missed by > 1 month ☐ 9 Not attempted/disabled

SEASON: _____

NOTE: Use chart to assist in correct response. If not immediately provided, say “現在是春天，夏天，秋天，還是冬天？”

	Correct	Error/ Refused	Not Att/Disabled
13A. 我們住在哪個州？哪個城市／鎮／村？	<input type="radio"/> 2	<input type="radio"/> 0	<input type="radio"/> 9
B 哪個城市／鎮／村？	<input type="radio"/> 2	<input type="radio"/> 0	<input type="radio"/> 9
C. 這是個診所，商店，還是住家？	<input type="radio"/> 1	<input type="radio"/> 0	<input type="radio"/> 9

NOTE: If the participant gives no response in 10 seconds and there are still at least 10 seconds of remaining time, gently remind him only once “哪些（其他）動物有四條腿？” For the first incorrect answer, remind the participant “我要你 出四條腿動物的名稱”

14. 什麼動物有四條腿？告訴我越多越好
(30 seconds)

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total correct responses

接下來是有關兩種相近的東西的問題，例如，一個橙子和一個香蕉——它們相近是因為兩個都是水果。

15. 一個橙子和一個香蕉兩個都是水果 (pause for 2 sec., then ask:)
(coach for correct answer if needed for "a" only)

A. 一個手臂和一條腿兩個都是.....?

- 2 ☐ Body parts, limbs, extremities
1 ☐ Long, bend, muscles, bones, etc.
0 ☐ Incorrect/Don't Know
9 ☐ Not attempted/disabled

RECORD RESPONSE HERE: _____

C. 吃和睡二者都是.....?

- 2 ☐ Necessary bodily functions
1 ☐ Other correct answer
0 ☐ Incorrect/Don't Know
9 ☐ Not attempted/disabled

RECORD RESPONSE HERE: _____

B. 笑和哭二者都是.....?

- 2 ☐ Expressions of feelings/emotions
1 ☐ Other correct answer
0 ☐ Incorrect/Don't Know
9 ☐ Not attempted/disabled

RECORD RESPONSE HERE: _____

16a. 如果你看到你的鄰居房子起火了，你要採取什麼行動？(prompt 你還有可能做什？ once only, if necessary)

NOTE Score 1 point (up to 2) for each correct responses: call 911, alert fire/police department, save/alert residents, help put out fire, safeguard your own property/family, alert neighbors, try to help.

No. of appropriate actions: ☐ 0 ☐ 1 ☐ 2

B. 如果你將借來的雨傘丟了，你將採取什麼行動？
(1 point for each category of actions)

- | | | | |
|--------------------|---------------------------------|---------------------------------------|--|
| Inform/Apologize | <input type="radio"/> 1 Correct | <input type="radio"/> 0 Error/Refused | <input type="radio"/> 9 Not Att/Disabled |
| Replace/Compensate | <input type="radio"/> 1 Correct | <input type="radio"/> 0 Error/Refused | <input type="radio"/> 9 Not Att/Disabled |

C. 如果你發現一個封了口的，有地址和新郵票的信封，你將採取什麼行動？

- 2 ☐ Mail
1 ☐ Try to locate the owner
0 ☐ Inappropriate action
9 ☐ Not attempted/disabled

17. 準確重複我所說的：

a. 他情願回家

2 ☐ Correct

1 ☐ 1 or 2 missed/wrong words

0 ☐ 3 or more missed/wrong words

9 ☐ Not attempted/disabled

NOTE For each part of 17b, score 1 only if repeated exactly as given

b. 現在重複.....

	<u>Correct</u>	<u>Error/ Refused</u>	<u>Not Att/Disabled</u>
這個色的圓圈比	<input type="radio"/> 1	<input type="radio"/> 0	<input type="radio"/> 9
藍色的方塊重	<input type="radio"/> 1	<input type="radio"/> 0	<input type="radio"/> 9
	<input type="radio"/> 1	<input type="radio"/> 0	<input type="radio"/> 9

18. 請做這個動作：“舉起你的手”

1.5 ☐ Raises hand without prompting

1 ☐ Raises hand after prompting

.5 ☐ Reads correctly, but does not raise hand

0 ☐ Neither reads nor obeys

9 ☐ Not attempted/disabled

➡ 謝謝你，你現在可以把它放下了

19. 給我一個你的手書樣本。請寫：（他）想回家。(1 min.)

(may dictate 1 word at a time if necessary)

	<u>Correct</u>	<u>Error/ Refused</u>	<u>Not Att/Disabled</u>
a. 願意	<input type="radio"/> .5	<input type="radio"/> 0	<input type="radio"/> 9
b. 喜歡	<input type="radio"/> .5	<input type="radio"/> 0	<input type="radio"/> 9
c. 到	<input type="radio"/> .5	<input type="radio"/> 0	<input type="radio"/> 9
d. 去	<input type="radio"/> .5	<input type="radio"/> 0	<input type="radio"/> 9
e. 家	<input type="radio"/> .5	<input type="radio"/> 0	<input type="radio"/> 9

HAND USED TO WRITE SENTENCE: _____ *right* _____ *left*

20. 請重複以下的動作：(show pentagons - 1 minute)

NOTE For right-handed persons, present the sample on their left side. For left-handed persons, present the sample on their right side

a. Left Pentagon

- 4 ☐ 5 approx. equal sides
- 3 ☐ 5 but un-equal (>2:1) sides
- 2 ☐ Any other enclosed figure
- 1 ☐ 2 or more lines but without closure
- 0 ☐ Less than 2 lines
- 9 ☐ Not attempted/disabled

b. Right Pentagon

- 4 ☐ 5 approx. equal sides
- 3 ☐ 5 but un-equal (>2:1) sides
- 2 ☐ Any other enclosed figure
- 1 ☐ 2 or more lines but without closure
- 0 ☐ Less than 2 lines
- 9 ☐ Not attempted/disabled

c. Intersections

- 2 ☐ 4 cornered
- 1 ☐ Not 4-cornered enclosure
- 0 ☐ No enclosure
- 9 ☐ Not attempted/disabled

21. Take this paper with your:

NOTE For question 21 do not repeat any part of the command. (Use non-dominant hand)

	<u>Correct</u>	<u>Error/ Refused</u>	<u>Not Att/Disabled</u>
a. 左) (右) 手	<input type="radio"/> 1	<input type="radio"/> 0	<input type="radio"/> 9
b. 將它折一半, 並	<input type="radio"/> 1	<input type="radio"/> 0	<input type="radio"/> 9
c. 交還給我	<input type="radio"/> 1	<input type="radio"/> 0	<input type="radio"/> 9

22. 我早先讓你記住的三個詞是什麼？

a. 鞋

- 1.5 ☐ Spontaneous recall
- 1 ☐ After: 一個詞是指穿的東西
- .5 ☐ After: 它是鞋子, 襯衫, 還是襪子？
- 0 ☐ Still incorrect
- 9 ☐ Not attempted/disabled

b. 藍色

- 1.5 ☐ Spontaneous recall
- 1 ☐ After: 一個詞是指顏色
- .5 ☐ After: 它是藍色, 黑色, 還是棕色？
- 0 ☐ Still incorrect
- 9 ☐ Not attempted/disabled

c. 慈善

- 1.5 ☐ Spontaneous recall
- 1 ☐ After: 一個詞是指好的人品
- .5 ☐ After: 它是忠誠, 善良, 還是謙？
- 0 ☐ Still incorrect
- 9 ☐ Not attempted/disabled

23. 我們把面部／身體的這部份叫作什麼？(2 seconds each)

NOTE Ask this while pointing to the appropriate part on your own body. Do not repeat

	<u>Correct</u>	<u>Error/ Refused</u>	<u>Not Att/Disabled</u>
a. 前額	<input type="radio"/> .3	<input type="radio"/> 0	<input type="radio"/> 9
b. 下巴	<input type="radio"/> .3	<input type="radio"/> 0	<input type="radio"/> 9
c. 肩膀	<input type="radio"/> .3	<input type="radio"/> 0	<input type="radio"/> 9
d. 肘部	<input type="radio"/> .3	<input type="radio"/> 0	<input type="radio"/> 9
e. 手腕	<input type="radio"/> .3	<input type="radio"/> 0	<input type="radio"/> 9

24. 這是什麼？(show one at a time)

NOTE Present one item at a time and ask the participant to name it. If the participant cannot name an object in 2 seconds, put it in the participant's hand and ask "你叫這個是什 ？" If he/she still cannot name it, wait 4 seconds, say (for key) "它是鑰匙... 鑰匙"

	<u>Correct</u>	<u>Error/ Refused</u>	<u>Not Att/Disabled</u>
a. 勺子	<input type="radio"/> .3	<input type="radio"/> 0	<input type="radio"/> 9
b. 硬幣	<input type="radio"/> .3	<input type="radio"/> 0	<input type="radio"/> 9
c. 牙刷	<input type="radio"/> .3	<input type="radio"/> 0	<input type="radio"/> 9
d. 鑰匙	<input type="radio"/> .3	<input type="radio"/> 0	<input type="radio"/> 9
e. 梳子	<input type="radio"/> .3	<input type="radio"/> 0	<input type="radio"/> 9

Total number of objects either named spontaneously or repeated perfectly after coaching: (max. 5)

25. 記住這五個東西。我剛才給你看的五個東西是什麼？

NOTE :Terminate testing when the participant has reported 5 objects (including incorrect names) or when the participant cannot recall any additional item in 5 seconds.

	<u>Correct</u>	<u>Error/ Refused</u>	<u>Not Att/Disabled</u>
a. 勺子	<input type="radio"/> .6	<input type="radio"/> 0	<input type="radio"/> 9
b. 硬幣	<input type="radio"/> .6	<input type="radio"/> 0	<input type="radio"/> 9
c. 牙刷	<input type="radio"/> .6	<input type="radio"/> 0	<input type="radio"/> 9
d. 鑰匙	<input type="radio"/> .6	<input type="radio"/> 0	<input type="radio"/> 9
e. 梳子	<input type="radio"/> .6	<input type="radio"/> 0	<input type="radio"/> 9

26. 再說一遍，你在哪裏出生的？If (this matches with Q1, assume it is correct)

☐ 1 Correct ☐ 0 Error/Refused ☐ 9 Not Att/Disabled

這些是我們這次檢 的所有問題，謝謝你完成了這些問題。

Finish time (hr:min):

		:		
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Duration (minutes)

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VALIDITY OF SCORE

- | | |
|--|--|
| <input type="radio"/> 1 Valid | <input type="radio"/> 6 Probably invalid: impaired alertness and attentiveness |
| <input type="radio"/> 2 Probably invalid: poor hearing | <input type="radio"/> 7 Probably invalid: significant physical/mental discomfort |
| <input type="radio"/> 3 Probably invalid: poor eyesight | <input type="radio"/> 8 Probably invalid: other reasons |
| <input type="radio"/> 4 Probably invalid: impaired motor control | specify: <table border="1" style="display: inline-table; width: 250px; height: 20px; vertical-align: middle;"></table> |
| <input type="radio"/> 5 Probably invalid: language barrier | |

“舉起你的手”

