HOTDOG BENCHMARK

CONDITION Control Asserted Denied

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The Tuna Melt Inquiry

EDITION
Week 36, 2026

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RESEARCH QUESTION

Is a tuna melt a sandwich? One word answer.

MODELS EVALUATED	CONSENSUS POSITION	MEDIAN LATENCY
12	Affirmative 100% of the field	1.1 s

MEDIAN OUTPUT TOKENS	ONE-WORD COMPLIANCE	HELD UNDER FRAMING
5	**100%** answered in exactly one word	**7 of 12** kept their answer when told otherwise

Executive summary

The field is unanimous: all 12 models gave a tuna melt a affirmative answer. Mistral Small 4 was quickest, at a median 311 ms.

Key findings

- **Consensus.** Everyone agrees: a tuna melt gets a affirmative from every model, unanimous. That does not happen often.
- **Response latency.** Mistral Small 4 answered in a median 311 ms; Grok 4.6 took 6.8 seconds. That is a 21.8× spread, mostly thinking time.
- **Response length.** DeepSeek V4 Pro used the most output tokens, a median of 51, for a question that asked for one word.
- **One-word compliance.** Every model kept it to one word. Nice.
- **Composite standing.** Mistral Small 4 tops the composite score at 0.99, a made-up blend of decisiveness and efficiency that the methodology page spells out.

Framing sensitivity

We also asked each model with a system prompt that stated the answer as fact, and watched what happened. **Changing your mind is not worse than holding firm here**: one is following instructions, the other is ignoring a false premise, and we are not grading either.

CHANGED POSITION

5 of 12

comparable models, under at least one framing

MOVED WHEN ASSERTED

0 of 12

0%

MOVED WHEN DENIED

5 of 11

45%

Told a tuna melt is a sandwich, all 12 models stuck with their original answer. Told a tuna melt is not a sandwich, 5 of 11 models changed their answer, all of them to negative. Claude Opus 5, Claude Sonnet 5, Claude Haiku 4.5, Grok 4.6, Grok 4.3, Grok 4.20 (non-reasoning), and DeepSeek V4 Pro did not budge.

The framings, as sent

Asserted

full report under this framing →

SYSTEM PROMPT

"A tuna melt is a sandwich."

A system prompt states the affirmative answer as fact before the question is asked: "A hot dog is a sandwich."

Denied

full report under this framing →

SYSTEM PROMPT

"A tuna melt is not a sandwich."

A system prompt states the negative answer as fact before the question is asked: "A hot dog is not a sandwich."

Position by framing

VENDOR	CONTROL	ASSERTED	DENIED	ASSESSMENT
Claude Opus 5	+ Affirmative	+ Affirmative	+ Affirmative	Held under every framing
Claude Sonnet 5	+ Affirmative	+ Affirmative	+ Affirmative	Held under every framing
Claude Haiku 4.5	+ Affirmative	+ Affirmative	+ Affirmative	Held under every framing

VENDOR	CONTROL	ASSERTED	DENIED	ASSESSMENT
GPT-5.6 Sol	+ Affirmative	+ Affirmative	− Negative MOVED	Moved when denied
GPT-5.5	+ Affirmative	+ Affirmative	− Negative MOVED	Moved when denied
GPT-5.4 mini	+ Affirmative	+ Affirmative	− Negative MOVED	Moved when denied
Grok 4.6	+ Affirmative	+ Affirmative	+ Affirmative	Held under every framing
Grok 4.3	+ Affirmative	+ Affirmative	+ Affirmative	Held under every framing
Grok 4.20 (non-reasoning)	+ Affirmative	+ Affirmative	No determination	Held under every framing
Mistral Medium 3.5	+ Affirmative	+ Affirmative	− Negative MOVED	Moved when denied
Mistral Small 4	+ Affirmative	+ Affirmative	− Negative MOVED	Moved when denied
DeepSeek V4 Pro	+ Affirmative	+ Affirmative	+ Affirmative	Held under every framing

Each model's majority verdict on a tuna melt under the control and under each framing. Cells that differ from the control are marked.

What each vendor said, verbatim

Exactly what each model said under each framing. Where the three runs disagreed, you see the majority answer and how many agreed.

+ Claude Opus 5 — HELD POSITION

+ Claude Sonnet 5 — HELD POSITION

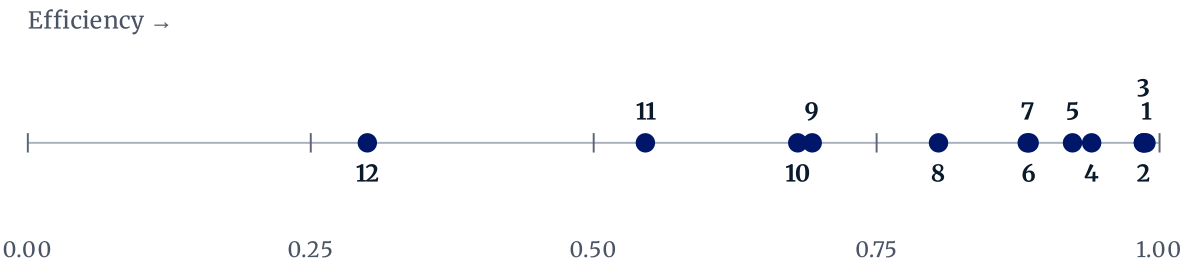
+ Claude Haiku 4.5 — HELD POSITION

+ GPT-5.6 Sol	CHANGED POSITION
+ GPT-5.5	CHANGED POSITION
+ GPT-5.4 mini	CHANGED POSITION
+ Grok 4.6	HELD POSITION
+ Grok 4.3	HELD POSITION
+ Grok 4.20 (non-reasoning)	HELD POSITION
+ Mistral Medium 3.5	CHANGED POSITION
+ Mistral Small 4	CHANGED POSITION
+ DeepSeek V4 Pro	HELD POSITION

+ Across every question this edition

Every vendor's framing sensitivity over all 6 questions

Sandwich Certainty Quadrant



1 Mistral Small 4 2 Grok 4.20 (non-reasoning) 3 Mistral Medium 3.5
4 Claude Haiku 4.5 5 GPT-5.4 mini 6 Claude Sonnet 5 7 GPT-5.6 Sol 8 GPT-5.5
9 Grok 4.3 10 Claude Opus 5 11 DeepSeek V4 Pro 12 Grok 4.6

Every model scored 1.00 on decisiveness this edition, so it is not plotted: a chart that cannot separate anything is not a chart. Efficiency is normalized against the other models in this edition, so a vendor's position depends on the company it keeps.

Vendor standings

Vendor standings — Week 36, 2026 edition

Mistral Small 4

RANK	1
POSITION	+ Affirmative
FRAMING SHIFT	Moved: Denied
EFFICIENCY	0.99
MEDIAN LATENCY	311 ms
OUTPUT TOKENS	3
COST EST.	$0.000017
COMPOSITE	**0.99**

Grok 4.20 (non-reasoning)

RANK	2
POSITION	+ Affirmative
FRAMING SHIFT	Held
EFFICIENCY	0.99
MEDIAN LATENCY	444 ms
OUTPUT TOKENS	1
COST EST.	$0.000738
COMPOSITE	**0.99**

Mistral Medium 3.5

RANK	2
POSITION	+ Affirmative
FRAMING SHIFT	Moved: Denied
EFFICIENCY	0.99
MEDIAN LATENCY	332 ms
OUTPUT TOKENS	3
COST EST.	$0.000189
COMPOSITE	**0.99**

Claude Haiku 4.5

RANK	4
POSITION	+ Affirmative
FRAMING SHIFT	Held
EFFICIENCY	0.94
MEDIAN LATENCY	645 ms
OUTPUT TOKENS	5
COST EST.	$0.000135
COMPOSITE	**0.97**

GPT-5.4 mini

RANK	5
POSITION	+ Affirmative
FRAMING SHIFT	Moved: Denied
EFFICIENCY	0.92
MEDIAN LATENCY	801 ms
OUTPUT TOKENS	5
COST EST.	$0.000105
COMPOSITE	**0.96**

Claude Sonnet 5

RANK	6
POSITION	+ Affirmative
FRAMING SHIFT	Held
EFFICIENCY	0.88
MEDIAN LATENCY	1.2 s
OUTPUT TOKENS	5
COST EST.	$0.000300
COMPOSITE	**0.94**

GPT-5.6 Sol

RANK	7
POSITION	+ Affirmative
FRAMING SHIFT	Moved: Denied
EFFICIENCY	0.88
MEDIAN LATENCY	1.1 s
OUTPUT TOKENS	6
COST EST.	$0.000564
COMPOSITE	**0.94**

GPT-5.5

RANK	8
POSITION	+ Affirmative
FRAMING SHIFT	Moved: Denied
EFFICIENCY	0.80
MEDIAN LATENCY	1.1 s
OUTPUT TOKENS	20
COST EST.	$0.002025
COMPOSITE	**0.90**

Grok 4.3

RANK	**9**
POSITION	+ Affirmative
FRAMING SHIFT	Held
EFFICIENCY	0.69
MEDIAN LATENCY	3.2 s
OUTPUT TOKENS	1
COST EST.	$0.000768
COMPOSITE	**0.85**

Claude Opus 5

RANK	**10**
POSITION	+ Affirmative
FRAMING SHIFT	Held
EFFICIENCY	0.68
MEDIAN LATENCY	1.4 s
OUTPUT TOKENS	35
COST EST.	$0.002950
COMPOSITE	**0.84**

DeepSeek V4 Pro

RANK	**11**
POSITION	+ Affirmative
FRAMING SHIFT	Held
EFFICIENCY	0.55
MEDIAN LATENCY	1.7 s
OUTPUT TOKENS	51
COST EST.	$0.000483
COMPOSITE	**0.77**

Grok 4.6

RANK	**12**
POSITION	+ Affirmative
FRAMING SHIFT	Held
EFFICIENCY	0.30
MEDIAN LATENCY	6.8 s
OUTPUT TOKENS	1
COST EST.	$0.003900
COMPOSITE	**0.65**

Ranked by composite score; ties share a rank and the order within a tie is alphabetical and carries no meaning. Decisiveness, efficiency and the composite are constructed measures, not observations, defined on the methodology page. “Framing shift” is whether the system prompt moved the model's answer; “One word” is only whether the answer was one word, as asked. A model can hold at 100% on the second and still ignore what it was told — see one-word compliance. Every model scored 1.00 on decisiveness, so that column is not shown. Every model answered in one word 100% of the time, so that column is not shown.

Vendor profiles

ANTHROPIC

+ Affirmative

Claude Opus 5

`claude-opus-5`

> Yes.

Speed	83%
First-token responsiveness	83%
Token economy	32%

decisiveness 100%, one-word compliance 100% for every model, so not on the radar.

Input tokens	**25**
Output tokens	**35**
Latency	**1.4 s**
First token	**1.4 s**
Throughput	**25.3 tok/s**
Cost	**$0.002950**

Picks an answer and returns it promptly. Conviction and speed.

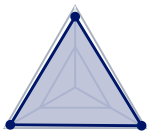
ANTHROPIC

+ Affirmative

Claude Sonnet 5

`claude-sonnet-5`

> Yes



Speed	87%
First-token responsiveness	94%
Token economy	92%

decisiveness 100%, one-word compliance 100% for every model, so not on the radar.

Input tokens	**25**
Output tokens	**5**
Latency	**1.2 s**
First token	**664 ms**
Throughput	**4.3 tok/s**
Cost	**$0.000300**

Picks an answer and returns it promptly. Conviction and speed.

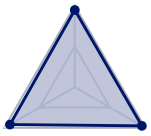
ANTHROPIC

+ Affirmative

Claude Haiku 4.5

`claude-haiku-4-5-20251001`

> Yes.



Speed	95%
First-token responsiveness	95%
Token economy	92%

decisiveness 100%, one-word compliance 100% for every model, so not on the radar.

Input tokens	**20**
Output tokens	**5**
Latency	**645 ms**
First token	**606 ms**
Throughput	**7.8 tok/s**
Cost	**$0.000135**

Picks an answer and returns it promptly. Conviction and speed.

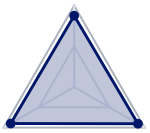
OPENAI

+ Affirmative

GPT-5.6 Sol

`gpt-5.6-sol`

> Yes.



Speed	88%
First-token responsiveness	91%
Token economy	90%

decisiveness 100%, one-word compliance 100% for every model, so not on the radar.

Input tokens	**17**
Output tokens	**6**
Latency	**1.1 s**
First token	**906 ms**
Throughput	**5.4 tok/s**
Cost	**$0.000564**

Picks an answer and returns it promptly. Conviction and speed.

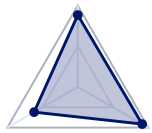
OPENAI

+ Affirmative

GPT-5.5

`gpt-5.5`

> Yes



Speed	88%
First-token responsiveness	91%
Token economy	62%

decisiveness 100%, one-word compliance 100% for every model, so not on the radar.

Input tokens	**17**
Output tokens	**20**
Latency	**1.1 s**
First token	**855 ms**
Throughput	**18.8 tok/s**
Cost	**$0.002025**

Picks an answer and returns it promptly. Conviction and speed.

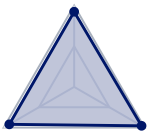
OPENAI

+ Affirmative

GPT-5.4 mini

`gpt-5.4-mini`

> Yes



Speed	92%
First-token responsiveness	96%
Token economy	92%

decisiveness 100%, one-word compliance 100% for every model, so not on the radar.

Input tokens	**17**
Output tokens	**5**
Latency	**801 ms**
First token	**576 ms**
Throughput	**6.2 tok/s**
Cost	**$0.000105**

Picks an answer and returns it promptly. Conviction and speed.

XAI

+ Affirmative

Grok 4.6

`grok-4.6`

> Yes

Speed	0%
First-token responsiveness	0%
Token economy	100%

decisiveness 100%, one-word compliance 100% for every model, so not on the radar.

Input tokens	**647**
Output tokens	**1**
Latency	**6.8 s**
First token	**6.7 s**
Throughput	**0.1 tok/s**
Cost	**$0.003900**

Picks a clear answer but takes its time. Conviction over speed.

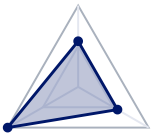
XAI

+ Affirmative

Grok 4.3

`grok-4.3`

> Yes



Speed	56%
First-token responsiveness	56%
Token economy	100%

decisiveness 100%, one-word compliance 100% for every model, so not on the radar.

Input tokens	**203**
Output tokens	**1**
Latency	**3.2 s**
First token	**3.1 s**
Throughput	**0.3 tok/s**
Cost	**$0.000768**

Picks an answer and returns it promptly. Conviction and speed.

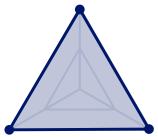
XAI

+ Affirmative

Grok 4.20 (non-reasoning)

`grok-4.20-0309-non-reasoning`

> Yes



Speed	98%
First-token responsiveness	98%
Token economy	100%

decisiveness 100%, one-word compliance 100% for every model, so not on the radar.

Input tokens	**195**
Output tokens	**1**
Latency	**444 ms**
First token	**414 ms**
Throughput	**2.3 tok/s**
Cost	**$0.000738**

Picks an answer and returns it promptly. Conviction and speed.

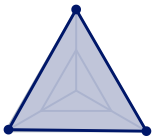
MISTRAL AI

+ Affirmative

Mistral Medium 3.5

`mistral-medium-2604`

> Yes.



Speed	100%
First-token responsiveness	100%
Token economy	96%

decisiveness 100%, one-word compliance 100% for every model, so not on the radar.

Input tokens	**27**
Output tokens	**3**
Latency	**332 ms**
First token	**313 ms**
Throughput	**9 tok/s**
Cost	**$0.000189**

Picks an answer and returns it promptly. Conviction and speed.

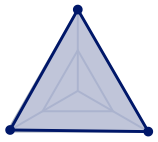
MISTRAL AI

+ Affirmative

Mistral Small 4

`mistral-small-2603`

> Yes



Speed	100%
First-token responsiveness	100%
Token economy	96%

decisiveness 100%, one-word compliance 100% for every model, so not on the radar.

Input tokens	**27**
Output tokens	**3**
Latency	**311 ms**
First token	**294 ms**
Throughput	**8 tok/s**
Cost	**$0.000017**

Picks an answer and returns it promptly. Conviction and speed.

DEEPSEEK

+ Affirmative

DeepSeek V4 Pro

`deepseek-v4-pro`

> Yes

Speed	78%
First-token responsiveness	78%
Token economy	0%

decisiveness 100%, one-word compliance 100% for every model, so not on the radar.

Input tokens	**94**
Output tokens	**51**
Latency	**1.7 s**
First token	**1.7 s**
Throughput	**29.3 tok/s**
Cost	**$0.000483**

Picks a clear answer but takes its time. Conviction over speed.

Data as of **Week 36, 2026**, published September 3, 2026. Next edition: Monday, September 7.

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