



# PERCEPTIONS OF CELLULAR AGRICULTURE: KEY FINDINGS FROM QUALITATIVE RESEARCH

While there is still much hard science to be done to bring cultured meat to grocery stores, it is important to note that the potential benefits of cellular agriculture will only be realized if consumers accept the technology and its products.

New Harvest, in partnership with the Environmental Law Institute (<https://www.eli.org/>) (ELI), sought out to conduct the first American focus group studies on attitudes towards cellular agriculture and cultured meat. The focus groups were conducted by Hart Research (<http://hartresearch.com/our-story/>), a firm with specific expertise in conducting public opinion research. The entire collaborative project was supported by the science and technology-focused Richard Lounsbery Foundation (<https://rlounsbery.org/mission.htm>).

The final report, “Perceptions of Cellular Agriculture: Key Findings from Qualitative Research” can be found here. (<https://www.dropbox.com/s/8k8tx9fvkqn7h7y/Hart%20ELI%20NH%20Report.pdf?dl=0>)

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## THE BACKSTORY

In mid-2016, New Harvest was invited to speak before the National Academies of Sciences on cellular agriculture to help advise on the regulation of new biotechnology products. At this event, we crossed paths with Dave Rejeski (<https://www.linkedin.com/in/david-rejeski-4a72463>), Director of the Technology, Innovation and the Environment Project at ELI.

Dave had previously conducted research on public attitudes about nanotechnology and synthetic biology, and had co-authored *A Guide for Communicating Synthetic Biology* (<https://www.wilsoncenter.org/publication/guide-for-communicating-synthetic-biology>) with the Woodrow Wilson Center. He was keen to learn about the public's attitudes towards cellular agriculture, with help from New Harvest.



#### **THE STUDY**

The focus group study was designed and conducted primarily by Abigail Davenport of Hart Research, with input on content and advice from New Harvest and ELI.

There were two separate groups, one of non-college-educated individuals (Group 1), and one of college educated individuals (Group 2). The demographics of the groups were specified in Appendix G of the full report (<https://www.dropbox.com/s/8k8tx9fvkqn7h7y/Hart%20ELI%20NH%20Report.pdf?dl=0>).

This is the script (<https://www.dropbox.com/s/20cxirmsmx297qr/FG%20Script.pdf?dl=0>) that was used for the focus group. This video (<https://vimeo.com/78403188>) was shown to both groups as part of the study design.

#### **THE DATA**

Because focus group research is qualitative in nature, and therefore open to interpretation in a number of ways, the data is available here for any researcher or interested party to check out.

- This is the non-college-educated focus group transcript.  
(<https://www.dropbox.com/s/18tmwekokvgow61/FG1%20Transcript.pdf?dl=0>) The full video is below.
  
- This is the college-educated focus group transcript.  
(<https://www.dropbox.com/s/1vxhlsoemd29zi4/FG2%20Transcript.pdf?dl=0>) The full video is below.

## **THE RESULTS**

Hart Research prepared a final report

(<https://www.dropbox.com/s/8k8tx9fvkqn7h7y/Hart%20ELI%20NH%20Report.pdf?dl=0>), *Perceptions on Cellular Agriculture: Key Findings from Qualitative Research*, and a video (<https://youtu.be/38YOMscxEJs>), summarizing the results.

## **COMMENTARY BY ISHA DATAR OF NEW HARVEST**

These comments are specifically my own, with minimal overlap from what was covered by Hart Research in their report and summary video.

Overall I should point out my bias – which is that I don't have the most faith in market research. In general, I believe market research is useful to test incremental advances – like the colors for the next iPhone – rather than transformative ones – like if prospective users

would see value in Twitter.

That said, this type of research has been used to explore public opinion about technological developments with longer term impacts, such as nanotechnology (<http://www.nanotechproject.org/publications/archive/synbio/>), synthetic biology (<http://www.synbioproject.org/publications/6655/>), and neural engineering (<http://www.synbioproject.org/publications/6684/>). Focus groups are snap shots. Though they provide rich information, the results cannot be extrapolated to national populations (they do provide important information needed to design statistically robust national surveys). This type of research needs to be updated as the science moves forward and products enter the market to address questions like:

- Will consumer perceptions change in the time that passes from now and when we actually see products on shelves?
- How valid is this research if the first products are not, in fact, exact replicas of conventional meat?

That being said, considering that social science research into cultured meat seems to be relatively well-funded (emphasis on *relatively*... compared to hard science research) through established research funding channels (at least in Europe, so far), I think these focus groups were a great “base layer” of American research from which we could pull out several ideas for future studies.

Here are a couple of points that stood out to me.

- **“Moral/ethical concerns did not surface.”** It was interesting to note how improved animal welfare was essentially a negligible benefit of cellular agriculture for both focus groups. It has always been a delicate balance for New Harvest to appeal to an animal-welfare focused community (from whom we receive the most philanthropic support *today*) compared to the general public (from whom consumer interest in cellular agriculture products is required in the future). It would be interesting to conduct further research to see if an emphasis on the moral/ethical benefits of cultured meat might be a deterrent for the general public.
- **Cultured meat as a complement to conventional meat.** As expected, participants in the focus groups seemed to be very concerned that cultured meat would *entirely* replace the existing livestock industry. Choice was clearly important. My concern, however, is that choice is more about an “opt out” rather than an “opt in,” because of the following related point, that...
- **“...people should consume cultured meat, but not me, personally.”** I found that, particularly in the college-educated group, that there was a strong acknowledgement that cultured meat and cellular agriculture would be beneficial to the world, with recognition of certain other populations who could be helped by cellular agriculture. But it was not as easy to see a personal interest in consuming cellular agriculture products. I am curious to see if New Harvest’s donor community thinks similarly. I am also curious to see what *would* prompt an individual to be excited to consume cultured meat personally. Do the externalized benefits even matter when it comes to a grocery store decision?
- **A conflict between terminology preferences and transparency.** I was not too surprised when both groups had generally negative impressions of the term “cultured meat,” but I thought it was impressive how relatively accurate their thoughts were when prompted with the term. Considering that there was a strong emphasis on the value of transparency with respect to food science, I wonder if it is more ideal to choose terminology which

is less descriptive but more marketable, or terminology which is more descriptive but less marketable. I think a helpful piece of further research would be gathering thoughts from uninformed individuals prompted with various terms, followed by a description of what the term is referring to, followed by a survey of their feelings regarding the discrepancy between their impressions of the term and the actual product the term was referring to.

- **The importance of *who* is working on cellular agriculture.** I have to admit it was frustrating to be behind the one-way mirror while the focus groups assumed that the study was being organized by a large corporation. I suppose we could have guessed that that would happen, but I think it would be very interesting to see how opinions might be different knowing that there is a donor-funded charity advancing a large proportion of cellular agriculture research.

Especially seeing how much individuals and personal stories have become a large part of today's culture, it would be interesting to test *who* would be more effective at sharing information about cellular agriculture. Dave Rejeski did some research on this for synthetic biology (<http://www.synbioproject.org/publications/a-guide-for-communicating-synthetic-biology/>), examining the role of the messenger (as well as the message) in communicating synthetic biology .

- **Negligible differences between both focus groups.** The main difference I saw between the groups was a tendency of the college-educated group to over-intellectualize - i.e. talk about what was good for *other people*, and how they *should* think, rather than provide their own personal reactions upfront. But I think the personal reactions were more or less the same. This confirmed my personal guiding principle - that it can be misleading to "other" consumers and imagining what "they" might be interested in, as if it is different from your own personal preferences.
- **A demand for more information.** I was actually a little bit surprised at how negatively the participants responded to the video we showed during the study (<https://vimeo.com/78403188>). The takeaway for me was that there is a desire for more information about the actual process and technology behind cultured meat. I also wondered how reception might have been different if the video was shown earlier in the study design - is it useful as an introduction, or does it come across as "propaganda" regardless of when it is seen?
- **A general lack of understanding of the existing animal agriculture system.** It would be interesting to see if an outline of the various issues associated with animal agriculture might be a better illustration of the benefits of cellular agriculture rather than stating, independently, the benefits of cellular agriculture.

In the end I thought this study was an excellent starting point for gathering some American perspectives on cellular agriculture and cultured meat. The obvious follow-on to this work would be a national survey built on the focus group findings, which provides a more detailed and generalizable picture of the American population.

What do you think?

*Written by Isha Datar, December 2016*

Fifty years hence, we shall escape the absurdity of growing a whole chicken in order to eat the breast or wing by growing these parts separately under a suitable medium.

—Winston Churchill, 1931

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