Scientific integrity in public health research: what, why, how?

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Integrity without knowledge is weak and useless;

Knowledge without integrity is dangerous and dreadful.

Samuel Johnson (1709-1784)

Scientific Integrity in Public Health

1. Introduction General Principles and its context (20 minutes)
2. Short discussion of the general principles (15 minutes)
3. Case analysis (30 minutes)
4. Results (15 minutes)
5. Conclusions (10 minutes)

Scientific Integrity in Public Health:Principles and Context

- Public health as a moral endeavour
- Integrity?
- Ethics audit & research ethics checklist

Public Health as Moral Endeavour

to protect the health of whole populations and to draw special attention to the weaker members of societies.

Moral Endeavour

- deciding what justice demands from Public Health programmes,
- what health inequalities are permissible from a moral point of view,
- how to conduct morally acceptable research, especially with vulnerable groups,
- how and when individual rights have to give way to public interest, and
- how to evaluate Public Health interventions ethically

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1917
THE INTEGRITY OF PUBLIC HEALTH WORK

- "*The integrity of the whole public health movement is conditioned on the integrity of the methods used in investigating and reporting on public health problems. Public health progress depends upon the discovery of public health truth. If fallacious conclusions are arrived at, useless administrative procedures will be initiated-and years of patient effort and vast sums of money will be wasted. And not only does the integrity of methods of investigation and reporting directly influence public health science and human welfare; it has an important indirect effect in that it influences the support accorded health measures.*"

- Editorial Am J Public Health 1917 January; 7(1): 40–41

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Integrity
Integrity is a concept of
actions, values, method
principles, expectations
In ethics, integrity is r
honesty and truthfuln
one's actions. Integri
opposite of h

Integrity

- A person: quality of a person's character

  Different types of integrity: intellectual, moral, professional, artistic….

- Applied to objects: integrity refers to the wholeness, intactness or purity of a thing; e.g. integrity of a database

Integrity as Standing for Something

- Having proper regard for one's role in a community process of deliberation over what is valuable and what is worth doing.
- One stands up for one's best judgment, and one has proper respect for the judgment of others.

- Calhoun, Cheshire (1995). ‘Standing for Something.’ *Journal of Philosophy*, XCII: 235–260.

Scientific Integrity

- Violation of integrity has consequences for:
  - Reliability of research results
  - Trust of the general public in science

Doing Public Health Research with Integrity

- interpersonal,
- professional,
- institutional,
- and public

} responsibility

Doing Public Health Research with Integrity

- Interpersonal responsibility : an obligation towards colleagues in providing accurate and reliable research
- Professional responsibility : adherence to professional standards to build personal integrity
- Institutional responsibility : expect an environment in which Public Health Research can be conducted in an ethically sound way
- Public responsibility: Public Health Researchers have an obligation to act in ways that serve the public

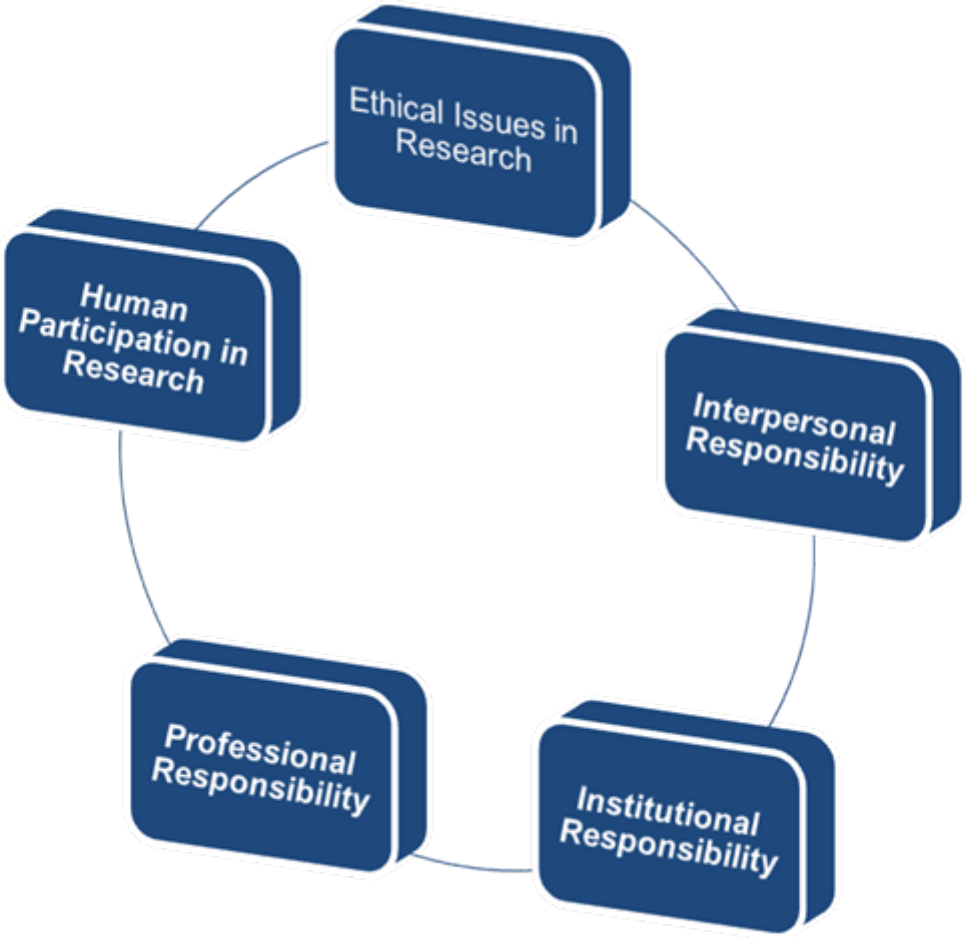
Doing Public Health Research with Integrity: Not a Matter of Mere Individuals

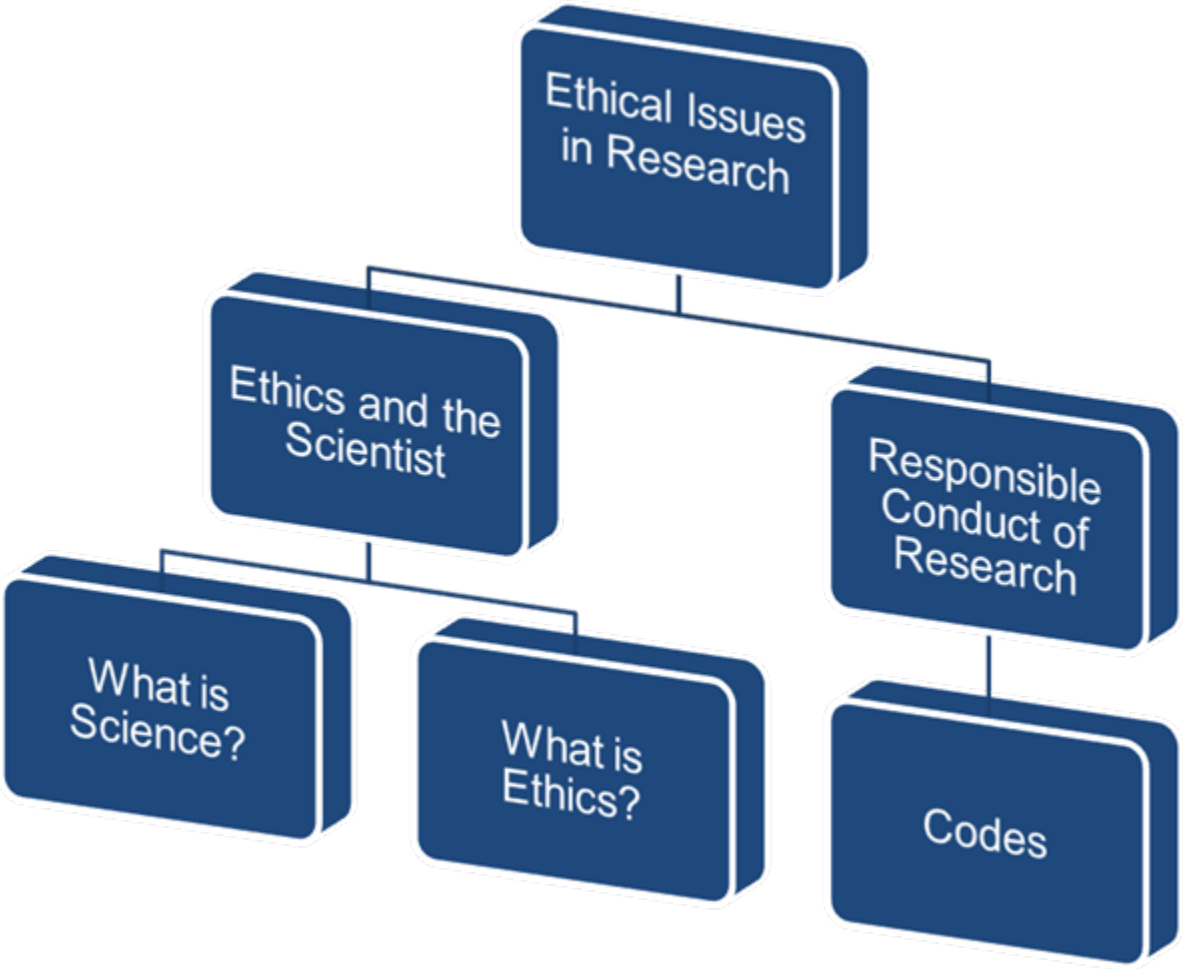
It is a matter of :

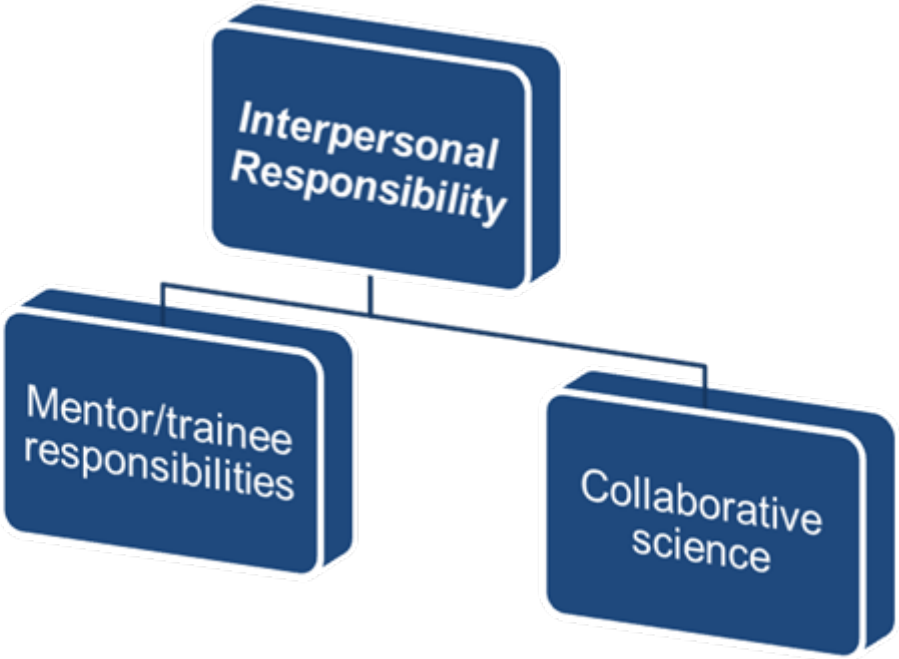
- individual (interpersonal + professional)
- social (institutional)
- Political (public)

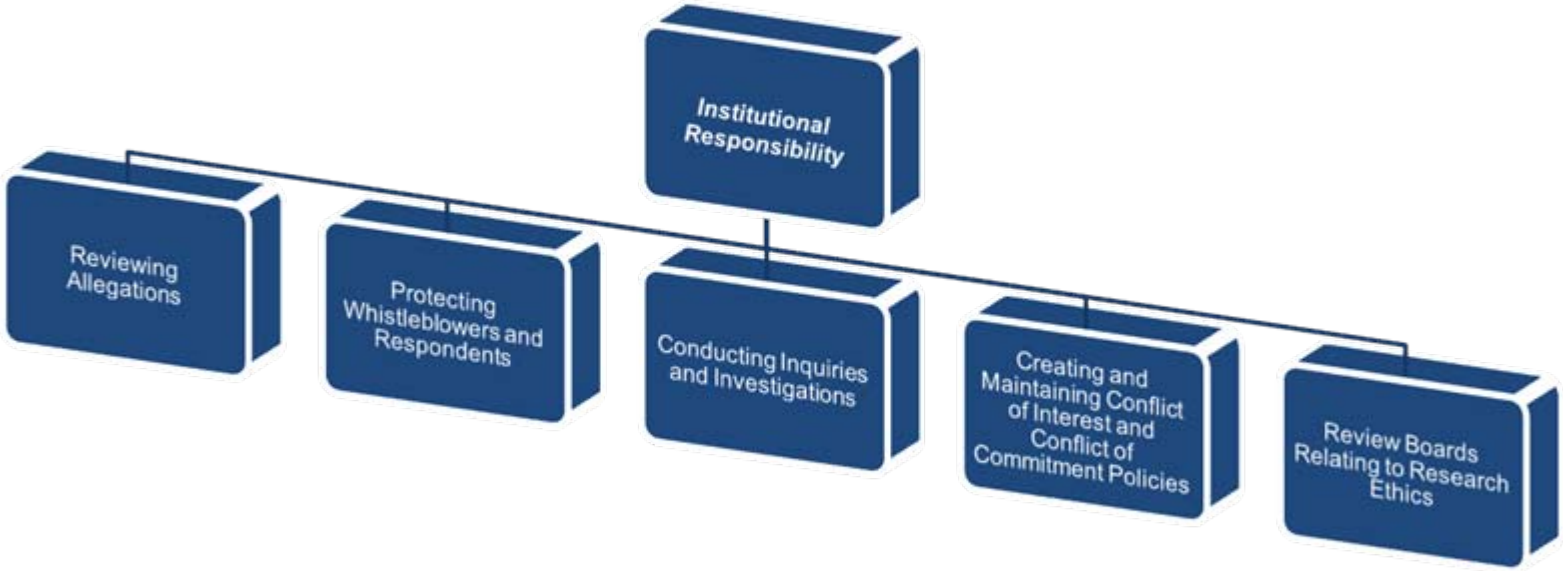
} responsibility

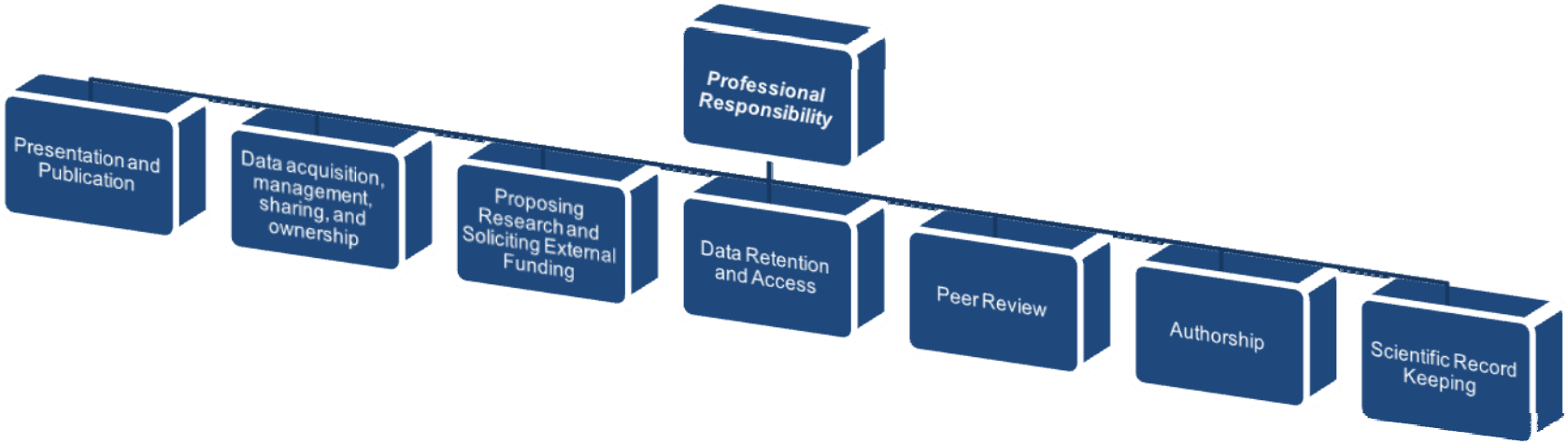
Research Ethics: Proposal Checklist

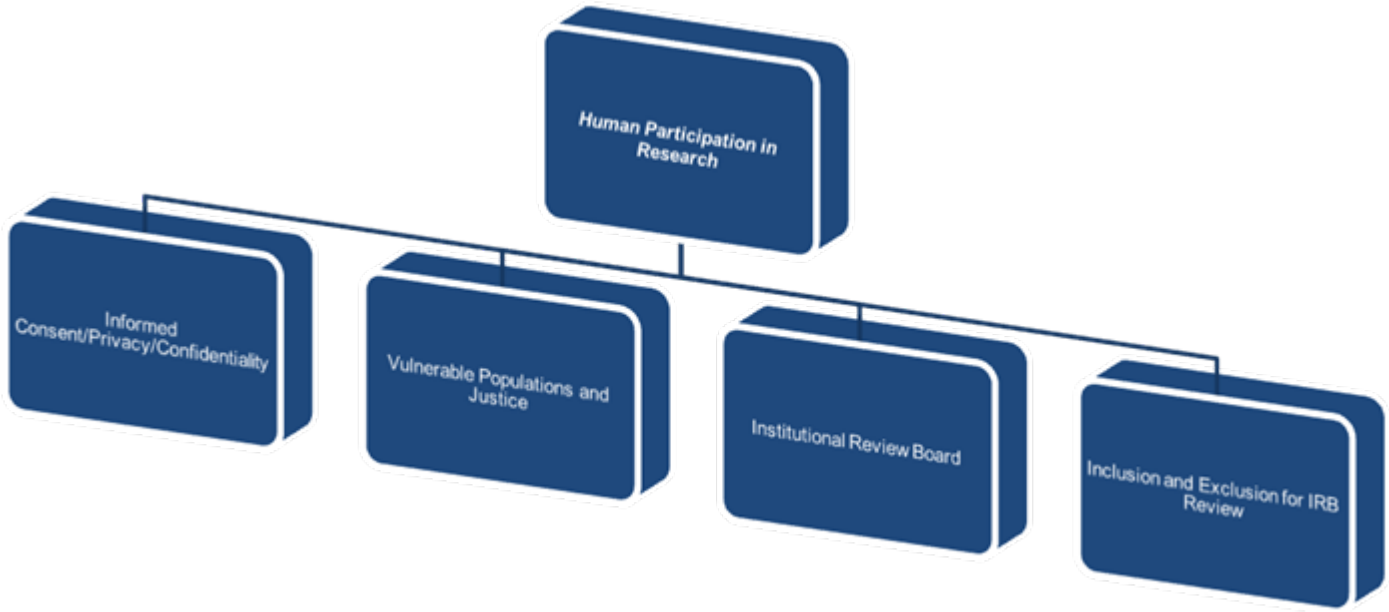



Ethical Issues in Research
Ethics and the Scientist
Responsible Conduct of Research
What is Science?
What is Ethics?
Codes


Interpersonal Responsibility
Mentor/trainee responsibilities
Collaborative science


Institutional Responsibility
Reviewing Allegations
Protecting Whistleblowers and Respondents
Conducting Inquiries and Investigations
Creating and Maintaining Conflict of Interest and Conflict of Commitment Policies
Review Boards Relating to Research Ethics


Professional Responsibility
Presentation and Publication
Data acquisition, management, sharing, and ownership
Proposing Research and Soliciting External Funding
Data Retention and Access
Peer Review
Authorship
Scientific Record Keeping

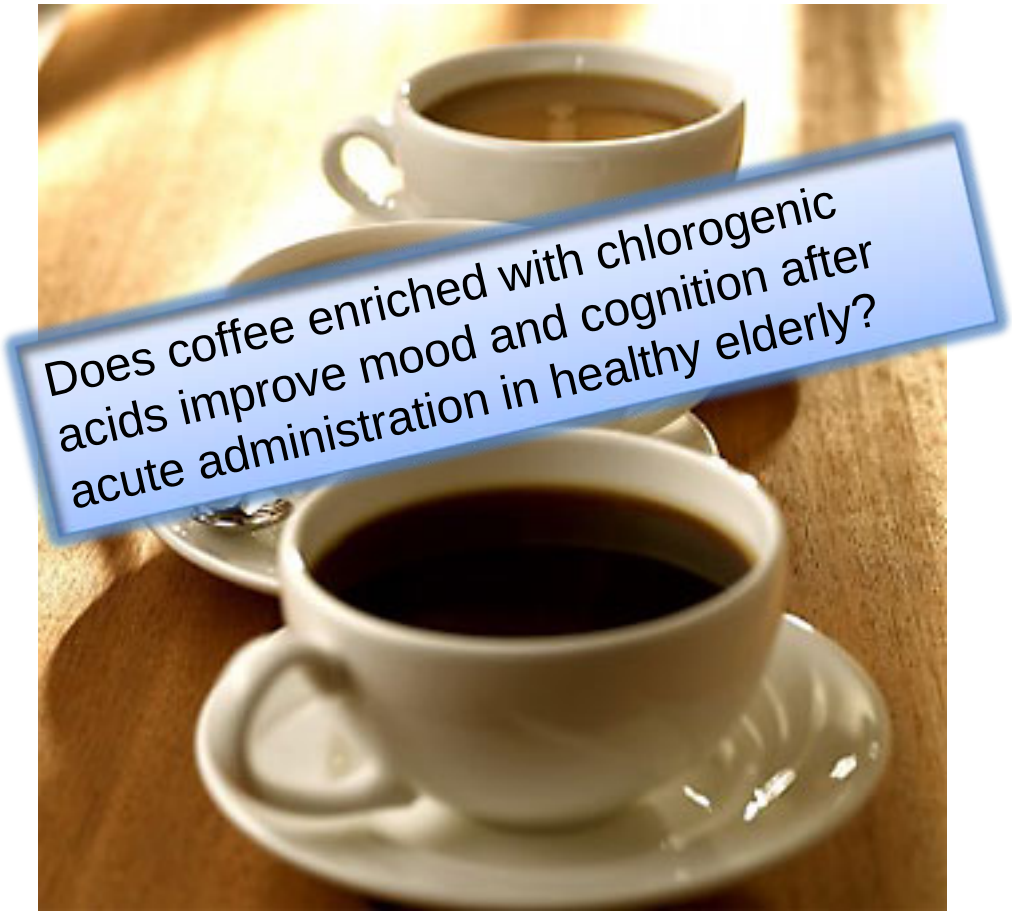

Human Participation in Research
Informed Consent/Privacy/Confidentiality
Vulnerable Populations and Justice
Institutional Review Board
Inclusion and Exclusion for IRB Review

Compromising integrity

- “The concept of stress remains prominent in public health and owes much to the work of Hans Selye (1907-1982), the "father of stress." One of his main allies in this work has never been discussed as such: the tobacco industry. After an analysis of tobacco industry documents, we found that Selye received extensive tobacco industry funding and that his research on stress and health was used in litigation to defend the industry's interests and argue against a causal role for smoking in coronary heart disease and cancer. These findings have implications for assessing the scientific integrity of certain areas of stress research and for understanding corporate influences on public health research, including research on the social determinants of health.”

- Am J Public Health 2011 Mar;101(3):411-8 *The "father of stress" meets "big tobacco": Hans Selye and the tobacco industry.* Petticrew MP, Lee K.

Case


Does coffee enriched with chlorogenic acids improve mood and cognition after acute administration in healthy elderly?

Imagine

- Study is sponsored by patient-interest-group of people with dementia and Alzheimer

Imagine

- Study is sponsored by national research institute

Imagine

- Study is sponsored by food industry

- Interpersonal responsibility : an obligation towards colleagues in providing accurate and reliable research
- Professional responsibility : adherence to professional standards to build personal integrity
- Institutional responsibility : expect an environment in which Public Health Research can be conducted in an ethically sound way
- Public responsibility: Public Health Researchers have an obligation to act in ways that serve the public

Research

- Does coffee enriched with chlorogenic acids improve mood and cognition after acute administration in healthy elderly? A pilot study
- Vanessa Cropley & Rodney Croft & Beata Silber & Chris Neale & Andrew Scholey & Con Stough & Jeroen Schmitt
- Psychopharmacology Received: 17 April 2011 / Accepted: 22 June 2011

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  - ‘*The coffee products were provided free of charge by Nestle Research Center. This research was funded by Nestec Ltd (Nestle Research Center, Lausanne, Switzerland). BYS and JAJS are employees of Nestlé. Nestec, through employees BYS and JAJS, was involved in the concept of the study, the trial design, monitoring of data, interpretation and the writing, and approval of the report. The authors have full control of all primary data. The other authors declare no conflicts of interest.*’
- Sources of support/disclosure statement: This research was funded by Nestec Ltd (Nestle Research Center, Lausanne, Switzerland). BYS and JAJS are employees of Nestlé. The other authors declare no conflicts of interest.

Disclosure of information

- More than?

Lector emptor

More information not always better?
The example of the ethicist.

More information not always better?

- Disclosure requirements are needed in contexts in which an ethicist is presented as an expert or her research cannot be assessed critically by those to whom it is addressed
- Ethicist = authority
- Here disclosure of financial relationships that might compromise the judgment of the bioethicist is useful in assessing the reliability of what he or she claims

- Lynn A . Jansen and Daniel P. Sulmasy" Bioethics, Conflicts of Interest, and the Limits of Transparency“ Hastings Center Report, no. 4 (2003):40-43.

More information not always better?

- Disclosure requirements are appropriate when the claims of a bioethicist or a scientist doing research on biomedical issues cannot be critically evaluated by those to whom they are addressed and so must be taken as authoritative

More information not always better?

- Normative editorials in medical journals and normative research in bioethics:
  - the rational value of the claims being advanced can and should be critically assessed by those to whom they are addressed

Focus on Transparency

- **Definition of *TRANSPARENCY***
- 1**:** something transparent; *especially* **:** a picture (as on film) viewed by light shining through it or by projection
- 2**:** the quality or state of being transparent

- http://www.merriam-webster.com/dictionary/transparency

Opaque transparency

What about Disclosure and Transparency in Public Health?

- Lessons learned:
  - disclosure offers transparency through the light of public health ethics and research ethics

Conclusion

Integrity in Public Health Research asks for

- a climate of public health ethics and research ethics,
- openness,
- **critical** transparency in matters of conflict of interest.

in·te·gra·ter
ment for mechanically
in·teg·ri·ty (in-teg′rə-tē) n.
values, artistic principles,
honesty. 2. The state of
integer, whole