



SDI Review Form 1.6

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Journal Name:	Annual Research & Review in Biology
Manuscript Number:	2013_ARRB_8763
Title of the Manuscript:	Current Methods Used in the Protein Carbonyl Assay
Type of the Article	Minireview Article

General guideline for Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound.

To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

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PART 1: Review Comments

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
Compulsory REVISION comments	34-thyobarbituric acid_-----→thiobarbituric acid 41-protein carbonyl was assessed since 1990 by Levine et al,in Method Enzymology 79-80- more references are required More details of the methods mentioned are required. Authors must mention the methods for measuring of protein carbonyl and that for measuring advanced glycation end products(fluorescent methods).	Endorsed. See the revised document. Endorsed. The sentence was rewritten as "oxidative attack on proteins was assessed later, compared with other processes". Endorsed. Extra references were included (eg. Zusterzeel et al., Free Radic Res 2000;33(5):471–6; Ramsay et al. Am J Respir Crit Care Med 2001;164(1): 155– 61) Endorsed. Some methods were updated, accordingly, while new techniques were added. Actually we focussed only on methods used for protein carbonyls, excluding those used for advanced glycation end products. These can be the subject of a minireview by themselves; therefore we did not touch this topic in our article. Still, we took into account your suggestion and updated the article accordingly, introducing the following paragraph: "Glycation is one of the major causes of



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		spontaneous damage to cellular and extracellular proteins in physiological systems; advanced glycation end products (AGEs) form when proteins interact with aldose sugars for an extended period of time (weeks, months). The initial glycation reaction is followed by a cascade of chemical reactions resulting in the formation of intermediate products (Schiff base, Amadori and Maillard products) and finally to a variety of derivatives named advanced glycation end products (AGEs). In hyperglycemic environments and in natural aging, AGEs are generated in increased concentrations; their level can be evaluated in plasma due to the fact that they are fluorescent compounds".
<u>Minor</u> REVISION comments		
<u>Optional/General</u> comments		