tigators showed that small amounts of alcohol in humans significantly decreased the ability of the living organism to kill staphylococci.

It is apparent that, as more scientific evidence is accumulated concerning consumption of ethanol, very little if any of this evidence is giving drinkers cause to rejoice.

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Prostaglandin Research

We read with interest Jean L. Marx's review of the rapid advances and possible important clinical implications of recent research on the prostaglandin system in accelerating and inhibiting platelet aggregation and its role in thrombus formation (Research News, 3 June, p. 1072). We wish to respond to some omissions, errors, and misleading statements which concern the discovery of prostaglandin I_2 (PGX, prostacyclin). We reported preliminary findings of the chemical structure of PGI_2 and an isomer in 1970 and published detailed papers in 1971 (*1*).

At that time we presented chemical evidence of a structure identical to PGI_2 which we called 6(9)-oxy-11,-15-dihydroxyprosta-5,13-dienoic acid, or Compound II, abbreviated as 6(9)-oxy-Δ^5-$PGF_{1\alpha}$. The other isomer which was isolated in larger quantities had a double bond in the Δ^7 instead of the Δ^5 position. It was not possible to know the true stereochemistry of the Δ^5 double bond because of the limited supply of isolated material, so the *E* configuration was drawn for simplicity instead of the *Z* configuration, which Johnson *et al.* (*2*) recently proved through chemical synthesis. The prostaglandin X isolated by Moncada *et al.* (*3*) from microsomes of pig and rabbit aorta incubated with prostaglandin endoperoxides appears to be identical to one of the isomers isolated by us 6 years ago and now shown to be PGI_2 by Johnson *et al.* (*2*). The similarity in structure of these products with that of the primary prostaglandins suggested to us that they were derived from the prostaglandin endoperoxides which had not yet been isolated (*1*). Further work by Pace-Asciak demonstrated that purified endoperoxides are indeed converted into these products (*4*). He discovered that the major stable product in the enzymatic reaction was 6-keto-$PGF_{1\alpha}$, a structure previously unreported (*5*). The 6-keto-$PGF_{1\alpha}$ appears to be a hydration product of the Δ^5 cyclic ether (PGI_2) which is formed from the prostaglandin endoperoxides specifically by an enzyme termed 6(9)-oxycyclase. This enzyme is abundant in stomach tissue but also occurs in many other tissues (*6*). The early research on PGI_2 and the discovery of this terminal pathway of prostaglandin endoperoxide metabolism was carried out at the Montreal Neurological Institute of McGill University in Montreal. The statement in the article by Marx that the major breakdown product of prostacyclin, namely 6-keto-prostaglandin $F_{1\alpha}$, was discovered 6 years ago is incorrect. This new prostaglandin was first reported by Pace-Asciak at the Research Institute of the Hospital for Sick Children, University of Toronto, last year (*5*). Indeed, before the final stereochemical assignment of PGI_2 was known, Pace-Asciak demonstrated that 6-keto-prostaglandin $F_{1\alpha}$ was a major product from the prostaglandin endoperoxides, and he postulated its origin from the Δ^5 cyclic ether now called PGI_2.

As research in this field is advancing extremely rapidly and has considerable clinical relevance, we feel that a more accurate presentation of the course of events and the people involved is important.

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