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## Nucleosides, Nucleotides and Nucleic Acids

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## As-Triazine-3, 5-Dione Acyclic Nucleosides

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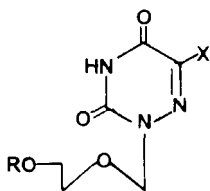
AS-TRIAZINE-3,5-DIONE ACYCLIC NUCLEOSIDES

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*Summary:* Certain acyclonucleoside analogues of the as-triazine-3,5-dione ring system have been synthesized and designed as possible inhibitors of pyrimidine nucleoside phosphorylases.

Acyclic nucleoside derivatives continue to receive their greatest attention as probable antiviral agents. However, benzylacyclouridine (BAU), an acyclic nucleoside derivative, has been recently shown to be a potent inhibitor of uridine phosphorylase<sup>2</sup> and to potentiate 5-fluoro-2'-dexoyuridine (FdUrd) growth inhibition of human pancreatic carcinoma.<sup>3</sup> With this in mind, we synthesized certain 6-substituted-1-[(2-hydroxyethoxy)methyl]-as-triazine-3,5-diones with anticipation that they too might function as inhibitors of pyrimidine nucleoside phosphorylases. The chemical preparation of these acyclonucleosides as well as their biological activities will be described.



R = Ac or H

X = H, Br, NH<sub>2</sub>, NHCH<sub>2</sub>C<sub>6</sub>H<sub>5</sub>,  
SCH<sub>2</sub>C<sub>6</sub>H<sub>5</sub>, etc.

REFERENCES

1. Fullbright Scholar from the Faculty of Science, University of Cadi Ayyad, Marrakech, Morocco.
2. Niedzwicki, J. G.; Chu, S. H.; el Kouni, M. H.; Rowe, E. C.; Cha, S. Biochem. Pharmac. 1982, 31, 1857.
3. Chu, M. Y. W.; Nagiub, F. N. M.; Iltzsch, M. H.; el Kouni, M. H.; Chu, S. H. ; Cha, S. Cancer Res. 1984, 44, 1852.